

IHC Prep & Detect Kit For Mouse Primary Antibody Safety Data Sheet (SDS)

Part NO.	Component	Size	Page #
HC001	Antigen Retrieval Buffer	100 mL	2-4
HC002	Washing Buffer	120 mL	5-7
HC003	Blocking Buffer	5 mL	8-10
HC000	Quenching Buffer	5 mL	11-13
HC004	Primary Antibody Diluent	100 mL	14-15
HC005M	Polymer HRP-Goat anti-Mouse Secondary Antibody	5 mL	16-17
HC006	Chromogen Component A	0.2 mL	18-20
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HC008	Signal Enhancer	5 mL	21-23
HC009	Counter Staining Reagent	5 mL	24-26
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SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Antigen Retrieval Solution

Part NO.: HC001

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group

5500 Pearl Street

STE 400

Rosemont, IL 60018

312-455-8498

proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Acute toxicity/Inhalation	Category 4
Repeated Exposure/Inhalation	Category 2

GHS label elements

Pictogram:



Signal word: Warning

Hazard statements:

H332 – Harmful if inhaled

H373 – May cause damage to organs (Respiratory Tract)

Precautionary statements:

P304+P340+P312 – If INHALED: Remove person to fresh air and keep comfortable. Call a poison center or doctor if not feeling well.

P314 – Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to an approved waste disposal plant.

P264 – Wash hands thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P321 – Specific treatment (see supplemental first-aid measures on this label).

P362 – Take off contaminated clothing.

P302+P352 – IF ON SKIN: wash with plenty of water.

P332+P313 – IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P337+P313 – IF eye irritation persists: Get medical advice/attention.

Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

Tris-base	0.5M	77-86-1
EDTA-2Na	0.05M	139-33-3

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure

Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at 2-8°C. When the kit is in use, place at room temperature or up to 37°C. This buffer is heated to 95-100°C during use.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: Not available

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce

emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: clear to amber

Odor: Not available.

Odor threshold: Not available.

pH: 9.0.

Melting point: Not available.

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility: Soluble in water or aqueous buffers.

Partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No information available
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:
Acute toxicity: Not available
Irritation/Corrosion: Not available.
Sensitization: May cause sensitization of susceptible persons.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Oral – May cause damage to kidneys through prolonged or repeated exposure
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:
Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: May cause sensitization of susceptible persons.
Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:
Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.
Short term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Long term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

Data not yet available.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations
This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304:
Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found. State regulations:
California Prop65: Not listed

International regulations:
EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Washing Buffer (30x)

Part NO.: HC002

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group

5500 Pearl Street

STE 400

Rosemont, IL 60018

312-455-8498

proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

None

GHS label elements

Pictogram: None

Signal word: None

Hazard statements:

None

Precautionary statements:

P304+P340+P312 – If INHALED: Remove person to fresh air and keep comfortable. Call a poison center or doctor if not feeling well.

P314 – Get medical advice/attention if you feel unwell.

P264 – Wash hands thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: wash with plenty of water.

P332+P313 - IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+P313 - IF eye irritation persists: Get medical advice/attention.

Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

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

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure

Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures: For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused

environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8). Keep container tightly closed, and in a cool, well-ventilated area. Store at 4°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: Not available

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical

products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: clear to amber

Odor: Not available.

pH: 8.0

Melting point: Not available.

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility: Not available.

Partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No information available

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:

Acute toxicity: Not available

Irritation/Corrosion: Not available.

Sensitization: May cause sensitization of susceptible persons.

Mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Teratogenicity: Not available.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Oral – May cause damage to kidneys through prolonged or repeated exposure

Aspiration hazard: Not available.

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:

Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: May cause sensitization of susceptible persons.
Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:

Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.

Short term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Long term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.

General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

No substances known to be hazardous to the environment.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations

This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

International regulations:

EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS

Revision number: 0

Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Blocking Buffer
Part NO.: HC003

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:
312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture
None

GHS label elements

Pictogram:



Signal word: None

Hazard statements:

None

Precautionary statements:

P304+P340+P312 – IF INHALED: Remove person to fresh air and keep comfortable. Call a poison center or doctor if not feeling well.
P314 – Get medical advice/attention if you feel unwell.
P264 – Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: wash with plenty of water.
P332+P313 - IF SKIN irritation occurs: Get medical advice/attention.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P337+P313 - IF eye irritation persists: Get medical advice/attention.
Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

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

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist,

	consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed
Potential acute health effects
Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms
Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure
Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary
Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:
For non-emergency personnel: No action shall be taken involving any

personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at 4°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: Not available

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard

should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: clear to amber

Odor: Not available.

Odor threshold: Not available.

pH: Not available.

Melting point: Not available.

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility: Not available.

Partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No information available

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:

Acute toxicity: Not available

Irritation/Corrosion: Not available.

Sensitization: May cause sensitization of susceptible persons.

Mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Oral – May cause damage to kidneys through prolonged or repeated exposure
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:
Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: May cause sensitization of susceptible persons.
Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:

Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.

Short term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Long term exposure: Not available.

Potential immediate effects: Not available.
Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

No substances known to be hazardous to the environment.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the

requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations
This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

International regulations:
EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Quenching Buffer
Part NO.: HC000

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:
312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture
Short-term (acute) aquatic hazard (Category 3), H402

GHS label elements

Pictogram: None

Signal word: None

Hazard statements:

H402-Harmful to aquatic life

Precautionary statements:

P304+P340+P312 – If INHALED: Remove person to fresh air and keep comfortable. Call a poison center or doctor if not feeling well.

P314 – Get medical advice/attention if you feel unwell.

P501–Dispose of contents/container to an approved waste disposal plant.

P273 – Avoid release to the environment.

P264 – Wash hands thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P362 - Take off contaminated clothing.

P302+P352 - IF ON SKIN: wash with plenty of water.

P332+P313 - IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P337+P313 - IF eye irritation persists: Get medical advice/attention.

Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

H ₂ O ₂	3%	7722-84-1
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4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist,

	consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed
Potential acute health effects
Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure
Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

Proteintech Group, USA,
5500 Pearl Street, Suite 400,
Rosemont, IL 60018, USA
t 1-888-478-4522
f 1-312-4558408

Proteintech Europe,
4th Floor, 196 Deansgate, Manchester,
M3 3WF
t (+44)-161-83-93-007
f (+44)-161-24-13-103

San Ying Biotechnology, China,
D3-3, No.666 Gaoxin Avenue, Wuhan East Lake
Hi-tech Development Zone, Wuhan, P.R.C.
t 86-27-87531629
f 86-27-87531627

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at 4°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: 1.5mg/m³

Basis: Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: clear to amber

Odor: Not available.

Odor threshold: Not available.

pH: Not available.

Melting point: Not available.

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: 0.67 kPa at 30 °C.

Vapor density: Not available.

Relative density: Not available.

Solubility: Soluble at 20 °C.

Partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No information available

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:

Acute toxicity: Not available

Irritation/Corrosion: Not available.

Sensitization: May cause sensitization of susceptible persons.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Oral – May cause damage to kidneys through prolonged or repeated exposure
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:

Eye contact: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Skin contact: May cause sensitization of susceptible persons.

Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:

Eye contact: No specific data.

Inhalation: No specific data.

Skin contact: No specific data.

Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.

Short term exposure: Not available.

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure: Not available.

Potential immediate effects: Not available.

Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

No substances known to be hazardous to the environment.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations

This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

International regulations:

EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS

Revision number: 0

Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Primary Antibody Diluent

Part NO.: HC004

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group

5500 Pearl Street

STE 400

Rosemont, IL 60018

312-455-8498

proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS label elements

Pictogram: None

Signal word: None

Hazard statements: None

Precautionary statements: None

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

Tris	N/G	77-86-1
BSA	N/G	9048-46-8
Gelatin (cold water fish skin)	N/G	9000-70-8
Sodium Azide	N/G	26628-22-8
Tween-20	N/G	9005-64-5

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Rinse with disinfectant cleaner. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	If inhaled move victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

Ingestion	Flush out mouth with water. If material has been swallowed give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
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Most important symptoms/effects, acute, and delayed
Potential acute health effects
Skin contact: None

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure

Ingestion: Repeated ingestion may cause damage to organs.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: None.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use a water spray, CO₂, or dry powder.

Unsuitable extinguishing media: No information available

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures: For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small/Large spill: : Absorb spills of reagents and patients samples with absorbent paper, taking care not to spread the material. Clean spill area with water.

7. HANDLING AND STORAGE:

Handle as if capable of transmitting a disease. Use PPE. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at 2-8°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

8. EXPOSURE CONTROLS/PPE:

Follow good laboratory practices using universal and standard precautions. In accordance with Universal Precautions, gloves, masks, and gowns should be worn if handling the material. Do not pipette by mouth.

Sodium Azide:

ACGIH TLV: Ceiling: 0.29 mg/m³ Ceiling: 0.11 ppm
OSHA PEL: Not applicable
NIOSH REL: Ceiling: 0.3 mg/m³, Ceiling: 0.1 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Colorless Liquid
Color: None
Odor: Not available.
Odor threshold: Not available.
pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Burning time: Not applicable.
Burning rate: Not applicable
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.
Solubility: Not available.
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
SADT: Not available.
Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known
Chemical stability: Stable under normal conditions
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No information available
Incompatible materials: No information available
Hazardous decomposition products: No information available

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:
Acute toxicity: Not available
Irritation/Corrosion: Not available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Not available.
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION:

Data not yet available.

13. DISPOSAL CONSIDERATIONS:

Disposal should be made in accordance with existing procedure and protocols currently in place. Observe all federal, state, and local regulations pertaining to waste disposal.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations
This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304:
Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found. State regulations:
California Prop65: Not listed

International regulations:
EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Polymer HRP-Goat anti-Mouse Secondary Antibody
Part NO.: HC005M

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Skin irritation	Category 2
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GHS label elements

Pictogram: None

Signal word: None

Hazard statements:

None

Precautionary statements:

P264 – Wash hands thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P314 – Get medical advice/attention if you feel unwell.

P302+P352 – IF ON SKIN: wash with plenty of water.

P332+P313 – IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses if present and easy to do - continue rinsing.

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

Proclin 150	0.1%	55965-84-9
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4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Rinse with disinfectant cleaner. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	If inhaled move victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give

oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

Ingestion

Flush out mouth with water. If material has been swallowed give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Skin contact: None

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure

Ingestion: Repeated ingestion may cause damage to organs.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: None.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use a water spray, CO₂, or dry powder.

Unsuitable extinguishing media: No information available

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures: For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small/Large spill: : Absorb spills of reagents and patients samples with absorbent paper, taking care not to spread the material. Clean spill area with water.

7. HANDLING AND STORAGE:

Handle as if capable of transmitting a disease. Use PPE. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at -2-8°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

8. EXPOSURE CONTROLS/PPE:

Follow good laboratory practices using universal and standard precautions. In accordance with Universal Precautions, gloves, masks, and gowns should be worn if handling the material. Do not pipette by mouth.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Liquid
Color: Not available.
Odor: Not available.
Odor threshold: Not available.
pH: Not available.
Melting point: Not available.
Boiling point: Not available.
Flash point: Not available.
Burning time: Not applicable.
Burning rate: Not applicable
Evaporation rate: Not available.
Flammability (solid, gas): Not available.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: Not available.
Vapor density: Not available.
Relative density: Not available.
Solubility: Soluble
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
SADT: Not available.
Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known
Chemical stability: Stable under normal conditions
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No information available
Incompatible materials: No information available
Hazardous decomposition products: No information available

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:
Acute toxicity: Not available
Irritation/Corrosion: Not available.
Sensitization: Not available.
Mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Not available.
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION:

Data not yet available.

13. DISPOSAL CONSIDERATIONS:

Disposal should be made in accordance with existing procedure and protocols currently in place. Observe all federal, state, and local regulations pertaining to waste disposal.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations
This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304:
Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found. State regulations:
California Prop65: Not listed

International regulations:
EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Chromogen Component A and B

Part NO.: HC006 and HC007

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group

5500 Pearl Street

STE 400

Rosemont, IL 60018

312-455-8498

proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Acute Toxicity - Oral	Category 3
Acute Toxicity - Skin	Category 3
Acute Toxicity - Inhalation	Category 3

GHS label elements

Pictogram:



Signal word: Danger

Hazard statements:

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

Precautionary statements:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink, or smoke when using this product

P280 Wear protective gloves/ eye protection/ face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P362 - Take off contaminated clothing and wash before reuse.

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.

P405 - Store locked up.

P404 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 - Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

4- Amino -N, N-Dimethylphenidate	99-98-9
H ₂ O ₂	<0.05% 7722-84-1

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give oxygen if breathing is difficult. If the patient eats or inhales the substance, no oral-to-mouth respiration shall be performed. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments: Be aware that symptoms may be delayed as a result of targeted treatment based on the symptoms that appear.

Protection of first-aiders: Remove all fire sources and increase ventilation. Avoid contact with skin and eyes. Avoid inhaling dust. Use protective equipment, including breathing surfaces

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: dry powder, carbon dioxide or alcohol-resistant foam.

Unsuitable extinguishing media: Avoid using too strong water vapor to extinguish the fire because it may spread and disperse the flames

Specific hazards arising from the chemical: Toxic fumes may be released when burned. When heated, the container may explode. Containers exposed to fire may leak contents through pressure relief valves. Exposure to heat or contact with flames can cause expansion or explosive decomposition.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:
Ensure adequate ventilation. Clear all ignition sources. Quickly evacuate personnel to safety, stay away from leak areas and in the direction of the upper wind, using personal traps. Avoid inhaling vapor, smoke, gas, or dust.

Environmental precautions: Take steps to prevent further leaks or spills while ensuring safety. Avoid emissions into the surrounding environment.

Methods and materials for containment and cleaning up:

In the case of a small amount of leakage, the leakage can be absorbed by dry sand or inert adsorption material, and the embankment control is required in the event of a large number of leaks. Attachments or collectables should be stored in suitable closed containers and disposed of in accordance with relevant local laws and regulations. Remove all ignition sources and use fire-resistant flower tools and riot gear.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation.

Operate in a well ventilated area. Wear appropriate personal protective equipment. Avoid contact with the skin and into the eyes. Keep away from heat sources, sparks, open flames, and hot surfaces. Take measures to prevent the accumulation of static electricity.

Storage Precautions:

Keep the container closed. Store in a dry, cool, and ventilated place. Keep away from heat sources, sparks, open flames, and hot surfaces. Store away from incompatible materials and food containers

8. EXPOSURE CONTROLS/PPE:

Control parameters

Career exposure limits: No information available.

Biological limits: No information available.

Monitoring methods: EN 14042 Workplace Air Procedure Guidelines for evaluating exposure to chemical or biological reagents. GBZ/T 160.1-GBZ/T 160.81-2004

Workplace Air Toxic Substance Determination (Series Standard).

Engineering control: Maintain adequate ventilation, especially in enclosed areas. Make sure you have eye washes and showers near your workplace. Use explosion-proof appliances, ventilation, lighting, and other equipment. Set up emergency evacuation channels and necessary spillways,

Respiratory protection: If the vapor concentration exceeds the occupational exposure limit or if symptoms such as irritation occur, use a fully covered multi-function gas mask(US) or AXBEK type (EN 14387) gas mask tube.

Eye protection: Wear chemical goggles (in accordance with EU EN 166 or US NIOSH standards).

Body protection: Wear flame retardant anti-static protective clothing and anti-static protective boots.

Hand protection: Wear chemical protective gloves (e.g. butyl rubber gloves). Protective gloves that have been tested by the EU EN 374, US F739 or AS/NZS 2161.1 are recommended.

Other protections: Smoking, eating, and drinking are prohibited at the workplace. Work done, shower dressing. Maintain good hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solids or liquids

Color: Light brown

Odor: Not available.

pH: Not available.

Melting point: Not available.

Boiling point: 262°C

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.
Relative density: Not available.
Solubility: Mixed with water.
Partition coefficient: Not available.
Auto-ignition temperature: Not available.
Decomposition temperature: Not available.
SADT: Not available.
Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known
Chemical stability: Stable under normal conditions
Possibility of hazardous reactions: No information available
Conditions to avoid: No information available
Incompatible materials: No information available
Hazardous decomposition products: Under normal storage and use conditions, no dangerous decomposition products are produced.

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:
Acute toxicity: LC50 Oral - rat - 50 mg/kg
Irritation/Corrosion: No information available.
Sensitization: No information available.
Mutagenicity: No information available.
Carcinogenicity: No information available.
Reproductive toxicity: No information available.
Teratogenicity: No information available.
Specific target organ toxicity (single exposure): No information available.
Specific target organ toxicity (repeated exposure): No information available. Aspiration hazard: No information available.
Conclusion/Summary: No information available.

Numerical measures of toxicity

Acute toxicity estimates: No information available.

12. ECOLOGICAL INFORMATION:

Waste disposal method

Products: If you need medical treatment, bring your product containers or labels with you.

Unclean packaging: After the packaging is emptied, there may still be residual hazards, should be kept away from heat and fire sources, if possible returned to the supplier recycling.

Discard notes

See the Waste Disposal section.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

United Nations Dangerous Goods Number (UN): 2811
United Nations transport name: organic toxic solids, not otherwise specified
United Nations Risk Classification: 6.1

Packaging category: 3

Packaging method: Threaded glass bottles, iron cap press glass bottles, plastic bottles, or metal buckets (cans) outside ordinary wooden boxes. Threaded glass bottles, plastic bottles, or tinned thin steel drums (cans) are filled with floorboard flower boxes, fiberboard boxes or plywood boxes. Plastic ring top layer cowhide outer fiberboard barrels, plywood barrels, cardboard barrels, plastic bags plastic Xu in accordance with the recommended method into the package.

Transportation attention is suspect

Mixing with acids, alkalis, oxidants, food, and food additives is strictly prohibited. In transit should be sun-proof, rain-soaked, high-temperature protection. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and leakage emergency treatment equipment. Before transport, check that the packaging container is complete and sealed. Hazard signs and announcements shall be posted on the means of transport in accordance with the relevant transport requirements

15. REGULATORY INFORMATION:

US Federal Regulations

This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304:

Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:

Classification: Not applicable.

Composition/information on ingredients: No products were found. State regulations:

California Prop65: Not listed

International regulations:

EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS

Revision number: 0

Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Signal Enhancer
Part NO.: HC008

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:
Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:
312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Oral	Category 3
Skin Irritation	Category 2
Eye Irritation	Category 2
Acute Aquatic Toxicity	Category 1

GHS label elements

Pictogram:



Signal word: Warning

Hazard statements:

H301 - Toxic if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H400 - Very toxic to aquatic life.

Precautionary statements:

P264 – Wash hands thoroughly after handling.
P270 Do not eat, drink, or smoke when using this product
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.
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.
P391 Collect spillage.
P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.
Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

CuSO ₄	<1.5%	7758-98-7
H ₂ O		7732-18-5

4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed
Potential acute health effects
Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure
Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a

pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8). Keep container tightly closed, and in a cool, well-ventilated area. Store at 4°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: Not available

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process

equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: Blue

Odor: Not available.

pH: 3.5-4.5 (50 g/L, H₂O, 25°C)

Melting point: 110°C

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: 2.29 kg/m³ and 0.28 kg/m³

Vapor pressure: 9.7 hPa (25°C)

Vapor density: Not available.

Relative density: p(20) 2.284 g/mL

Solubility: Soluble in water or aqueous buffers.

Partition coefficient: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid: No information available
Incompatible materials: Oxidizing agents, Bases, Reducing agents, Nitrates
Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:
Acute toxicity: LD50 Oral - rat - 300 mg/kg
Remarks: anhydrous LD50 Dermal - rat - > 2,000 mg/kg
Irritation/Corrosion: Not available.
Sensitization: May cause sensitization of susceptible persons.
Mutagenicity: Not available.
Carcinogenicity: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
Reproductive toxicity: Not available.
Teratogenicity: Not available.
Specific target organ toxicity (single exposure): Not available.
Specific target organ toxicity (repeated exposure): Oral - May cause damage to kidneys through prolonged or repeated exposure
Aspiration hazard: Not available.
Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:
Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Skin contact: May cause sensitization of susceptible persons.
Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:
Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.
Short term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Not available.
Long term exposure: Not available.
Potential immediate effects: Not available.
Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.
General: No known significant effects or critical hazards.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

Toxicity: Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0.024 mg/L - 48 h
Persistence and degradability: No data available
Bioaccumulative potential: No data available

Mobility in soil: No data available
Results of PBT and vPvB assessment: No data available
Other adverse effects: Very toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Transport hazard class:	Packaging Group	Environmental Hazards
ADR/RID: 9	ADR/RID: III	ADR/RID: yes
IMDG: 9	IMDG: III	IMDG: yes
IATA 9	IATA III	IATA yes

15. REGULATORY INFORMATION:

US Federal Regulations
This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
Clean Air Act Section 602 Class II Substances: Not listed
DEA List I Chemicals (Precursor Chemicals): Not listed
DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304:
Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:
Classification: Not applicable.
Composition/information on ingredients: No products were found. State regulations:
California Prop65: Not listed

International regulations:
EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS
Revision number: 0
Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Counter Staining Reagent

Part NO.: HC009

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:

312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Serious eye damage/eye irritation	Category 1
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GHS label elements

Pictogram:



Signal word: Danger

Hazard statements:

H318 – Causes serious eye damage

Precautionary statements:

P304+P340+P312 – If INHALED: Remove person to fresh air and keep comfortable. Call a poison center or doctor if not feeling well.

P310 – Immediately call a POISON CENTER or doctor

P501 – Dispose of contents/container to an approved waste disposal plant.

P264 – Wash hands thoroughly after handling.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P321 – Specific treatment (see supplemental first-aid measures on this label).

P362 – Take off contaminated clothing.

P302+P352 – IF ON SKIN: wash with plenty of water.

P332+P313 – IF SKIN irritation occurs: Get medical advice/attention.

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

Hematoxylin		517-28-2
Aluminum Ammonium Sulfate		7784-25-0
Sodium Iodate	<0.05%	7681-55-2
Citric Acid		77-92-9

Choral Hydrate	302-17-0
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4. FIRST AID MEASURES:

General Advice	Consult a physician. Show this Safety Data Sheet to the doctor in attendance.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction Get medical attention if symptoms occur. If symptoms persist, consult a physician.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute, and delayed

Potential acute health effects

Skin contact: May cause sensitization of susceptible persons.

Over-exposure signs/symptoms

Skin contact: Repeated contact may cause allergic reactions in very susceptible persons. Avoid Repeat exposure

Ingestion: Repeated ingestion may cause damage to kidneys. Avoid Repeat Exposure

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11).

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: No information available

Specific hazards arising from the chemical: In a fire or if heated, a pressure increase will occur, and the container may burst.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable

training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air).

Methods and materials for containment and cleaning up:

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE:

Use only in area provided with exhaust ventilation. Avoid contact with skin, eyes, and clothing. Wear appropriate protective clothing (Section 8).

Keep container tightly closed, and in a cool, well-ventilated area. Store at 4°C.

Precautions for safe handling:

Protective measures: Put on appropriate personal protective equipment (see Section 8)

Advice on general occupational hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Do not store above the following temperature: +2°C to +8°C. Store in accordance with local regulations. Store in original container protected from light in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: Not available

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce

emissions to acceptable levels.

Individual protection measures:

Hygiene measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Solution

Color: clear to amber

Odor: Not available.

Odor threshold: Not available

pH: Not available

Melting point: >135°C

Boiling point: Not available.

Flash point: Not available.

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: 2.29 kg/m³ and 0.28 kg/m³

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: p(20) 1.542 g/mL

Solubility: Soluble in water or aqueous buffers.

Partition coefficient: -1.72

Auto-ignition temperature: 1010

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: None known

Chemical stability: Stable under normal conditions

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No information available

Incompatible materials: Oxidizing agents, Bases, Reducing agents, Nitrates

Hazardous decomposition products: Under fire conditions

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:

Acute toxicity: Not available

Irritation/Corrosion: Not available.

Sensitization: May cause sensitization of susceptible persons.

Mutagenicity: Not available.

Carcinogenicity: Not available.

Reproductive toxicity: Not available.

Teratogenicity: Not available.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Oral - May cause damage to kidneys through prolonged or repeated exposure

Aspiration hazard: Not available.

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

Information on the likely routes of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects:

Eye contact: No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Skin contact: May cause sensitization of susceptible persons.

Ingestion: May cause damage to kidneys with repeated exposure.

Symptoms related to the physical, chemical, and toxicological characteristics:

Eye contact: No specific data.

Inhalation: No specific data.

Skin contact: No specific data.

Ingestion: No specific data.

Delayed and immediate effects. Also chronic effects from short and long term exposure.

Short term exposure: Not available.

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure: Not available.

Potential immediate effects: Not available.

Potential delayed effects: Repeated contact may cause allergic reactions in very susceptible persons. Repeated ingestion may cause damage to kidneys.

Potential chronic health effects: Not available.

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates: Not available

12. ECOLOGICAL INFORMATION:

Data not yet available.

13. DISPOSAL CONSIDERATIONS:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the

requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations

This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304:

Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:

Classification: Not applicable.

Composition/information on ingredients: No products were found. State regulations:

California Prop65: Not listed

International regulations:

EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS

Revision number: 0

Revision: 07/22/2022

The above information is believed to be correct but should only be used as a guide for experienced personnel. Proteintech Group Inc. will not be liable for any damage resulting from the handling of or from contact with the above product. This SDS does not purport to be all-inclusive.

For lab use only, not for diagnostic or therapeutic work.

Proteintech Group, USA,
5500 Pearl Street, Suite 400,
Rosemont, IL 60018, USA
t 1-888-478-4522
f 1-312-4558408

Proteintech Europe,
4th Floor, 196 Deansgate, Manchester,
M3 3WF
t (+44)-161-83-93-007
f (+44)-161-24-13-103

San Ying Biotechnology, China,
D3-3, No.666 Gaoxin Avenue, Wuhan East Lake
Hi-tech Development Zone, Wuhan, P.R.C.
t 86-27-87531629
f 86-27-87531627

SAFETY DATA SHEET (SDS)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name: Mounting Media
Part NO.: HC0010

Chemical Name: Not applicable

REACH registration number: No registration number is given yet for this substance / substances in this mixture since the annual import quantity is less than one tonnage per annum or the transition period for its registration according to Article 23 of REACH has not yet expired.

Company/undertaking Identification:

Proteintech Group
5500 Pearl Street
STE 400
Rosemont, IL 60018
312-455-8498
proteintech@ptglab.com

Emergency telephone number:
312-455-8498

2. HAZARDOUS IDENTIFICATION:

GHS Classification of the substance or mixture

Skin irritation	Category 2
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GHS label elements

Pictogram:



Signal word: Danger

Hazard statements:

H304 – May be fatal if swallowed and enters airways.

H314 – Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210 – Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 – Do NOT induce vomiting.

P403+P235 – Store in a well-ventilated place. Keep cool.

3. INGREDIENT COMPOSITION/INFORMATION:

Mixture of the substances listed below, and additional trade secret chemicals.

Hydrocarbons, C11-c13, ISOALKANES	60-80%	EC 920-901-0
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4. FIRST AID MEASURES:

General Advice	If the suggested first aid measures do not prove sufficient, seek medical attention.
Skin Contact	Remove contaminated clothing. Thoroughly wash with water and soap for 15 minutes.

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Carry the afflicted person out of the contaminated area into a well-ventilated area or out for fresh air. For those aiding, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.
Ingestion	DO NOT induce vomiting. Seek immediate medical attention.

Most important symptoms/effects, acute, and delayed
Inhalation: Respiratory system irritation, headache, vertigo, nausea, and faint may occur during exposure to vapor concentrations above recommended level. It may also act as an anesthetic and affect central nervous system.

Skin contact: Prolonged and/or repeated exposure to low viscosity content may cause skin dryness or cracking. May be irritating to the eyes, nose, throat, and lungs.

Eye Contact: Eye irritation may occur during exposure to vapor concentrations above recommended level.

Ingestion: If swallowing occurs, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: None.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

5. FIRE FIGHTING MEASURES:

Suitable extinguishing media: Use a water spray, CO₂, or dry powder.

Unsuitable extinguishing media: Straight streams of water

Special hazards arising from the substance or mixture:

Hazardous by products of fire: Smoke, fume, incomplete combustion products, carbon oxides.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Advice for firefighters: Evacuate the area. Stay in danger area only with self-contained open-circuit compressed air breathing apparatus and a set for protecting the body from heat dissipation (fireproof clothing). Use water spray to cool fire exposed surfaces and to protect personnel.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel: When disposing of small quantities use protective clothing. When disposing of large quantities use self-contained open-circuit compressed air breathing apparatus or self-contained closed-circuit air breathing apparatus.

Secure a safety zone, remove all ignition sources, and in case of an accident inform the Emergency service and the manufacturer or sender. Position a prohibition sign with symbols of flame and devices that cause sparks.

Remove or neutralize all factors that may exacerbate the condition, use all allowed means of containing the situation and use recommended means of personal protection.

Environmental precautions: Use sand protective barrier to prevent further spillage of chemicals. Prevent environmental pollution by not allowing the chemicals to enter the sewage system, surface water or groundwater.

Methods and materials for containment and cleaning up:

Small/Large spill: Sand protective barrier or barriers made of similar materials. Sawdust, sand, mineral adsorbents. Secure proper ventilation. Contact the responsible person; in case of larger spills and possible environmental pollution contact National Protection and Rescue (112).

7. HANDLING AND STORAGE:

Keep away from sources of ignition and head. Do not use tools that cause sparks.

Secure proper ventilation. Prevent spilling into the sewage system and waterways.

Technical measures and storage conditions:

Keep in a cool and well-ventilated place. Keep away from heat and direct solar radiation.

Precautions for safe handling:

Packaging materials:

Teflon, polypropylene, stainless steel, carbon steel.

Requirements for storage rooms and vessels:

Keep away from food and drink. Keep the containers tightly closed. Store in a cool, well-ventilated area.

Advice for storage equipment:

The storage must be made of hard material; floors must be resistant to chemicals. There must be no drain that directly leads into sewage system. Secure proper ventilation.

Further information on storage conditions:

Suitable materials and coating are teflon, polypropylene, polyethylene, stainless steel, carbon steel.

Unsuitable materials and coatings include ethylene propylene diene monomer (EPDM), natural rubber, polystyrene, butyl rubber.

Recommendations:

This product attracts static electricity that may cause electrical sparking (ignition source) that may ignite flammable vapors of the liquid. The liquid is usually an isolator if its conductivity level is under 100 pS/m. It is considered a semiconductor that attracts static electricity if its conductivity level is less than 10,000 pS/m. Regardless of the type of the liquid (isolator or semiconductor), precautions are the same. Numerous factors, such as the liquid temperature, contaminants, antistatic additives, and filtration may severely influence the liquid conductivity.

8. EXPOSURE CONTROLS/PPE:

Control parameters:

Occupational exposure limits: 171ppm

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Physical state @ 40°C: Liquid

Color: Not available.

Odor: No odor.

Odor threshold: Not available.

pH: Not available.

Melting point: Not available.

Boiling point: 170-250°C

Flash point: 62°C

Burning time: Not applicable.

Burning rate: Not applicable

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Lower and upper explosive (flammable) limits: Not available.

Vapor pressure: Not available.

Vapor density: Not available.

Relative density: Not available.

Solubility: Soluble

Partition coefficient: Not available.

Auto-ignition temperature: >200° C

Decomposition temperature: Not available.

SADT: Not available.

Viscosity: Not available.

10. STABILITY AND REACTIVITY:

Reactivity: No information available.

Chemical stability: The product is chemically stable under standard ambient conditions of storing and using (room temperature).

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Open flames and high energy ignition sources.

Incompatible materials: Strong oxidants.

Hazardous decomposition products: Product decomposition will not occur at ambient temperature.

11. TOXICOLOGICAL INFORMATION:

Information on toxicology effects:

Acute toxicity: Not available

Irritation/Corrosion: Not available.

Sensitization: Not available.

Mutagenicity: Not available.

Carcinogenicity: No carcinogenicity studies were made, but since the product is not mutagenic and causes a minimal level of toxicity, it can be assumed that chronic exposure will not cause tumors.

Reproductive toxicity: Not available.

Teratogenicity: Not available.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this substance have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION:

Data not yet available.

13. DISPOSAL CONSIDERATIONS:

Submit for disposal to the legal person authorized by the Ministry of Environmental and Nature Protection. Do not dispose of the product's remains into the sewage system. Submit the remains to the collectors authorized by the ministry in charge. Do not dispose of the packaging into the sewage system. Submit the packaging to the collectors authorized by the ministry in charge.

European Waste Code: 08 XX XX

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

Empty Container Warning: Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static

electricity, or other sources of ignition. They may explode and cause injury or death.

14. TRANSPORT INFORMATION:

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION:

US Federal Regulations

This mixture is not listed on the TSCA Inventory. This substance is not SARA listed.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304:

Composition/information on ingredients: No products were found. SARA 304 RQ: Not applicable.

SARA 311/312:

Classification: Not applicable.

Composition/information on ingredients: No products were found. State regulations:

California Prop65: Not listed

International regulations:

EU REACH: Not listed

16. OTHER INFORMATION:

Reason for revision: Initial release of SDS

Revision number: 0

Revision: 07/22/2022

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