

DAB kit (IHC) SAFETY DATA SHEET (SDS)

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

Product Name: DAB kit (IHC)

Part NO.: PR30018

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:

H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
H315: Causes skin irritation
H318: Causes serious eye damage
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H341: Suspected of causing genetic defects
H350: May cause cancer
H360: May damage fertility or the unborn child
H302+H332: Harmful if swallowed or if inhaled
H410: Very toxic to aquatic life with long lasting effects

Precautionary statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P203: Obtain, read and follow all safety instructions before use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P281: Use personal protective equipment as required.

P264+P265: Wash hands [and ...] thoroughly after handling. Do not touch eyes.
P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P316: Get emergency medical help immediately.
P317: Get emergency medical help.
P318: if exposed or concerned, get medical advice.
P319: Get medical help if you feel unwell.
P321: Specific treatment (see ... on this label).
P330: Rinse mouth.
P363: Wash contaminated clothing before reuse.
P301+P312: IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
P301+P317: IF SWALLOWED: Get medical help.
P302+P352: IF ON SKIN: wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P332+P317: If skin irritation occurs: Get medical help.
P337+P317: If eye irritation persists: Get medical help.
P362+P364: Take off contaminated clothing and wash it before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P361+P354: IF ON SKIN: Take off Immediately all contaminated clothing. Immediately rinse with water for several minutes.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P305+P354+P338: IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P405: Store locked up.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P501: Dispose of contents/container to...
Hazards not otherwise classified: None known.

3. INGREDIENT COMPOSITION/INFORMATION:

3,3'-Diaminobenzidine tetrahydrochloride hydrate	<0.15%	868272-85-9
Imidazole	<0.5%	288-32-4
Sodium Perborate Tetrahydrate	≤0.03%	10486-00-7
Sodium pyrophosphate	<0.1%	7722-88-5

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 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 to dark purple
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.