

MILLON'S REAGENT (FOR PROTEIN)

PRODUCT CODE 866270

Intended Use

Millon's reagent is an analytical reagent used to detect the presence of tyrosine, the only amino acid containing a phenol group.

Principle And Interpretation

In Millon's test, the phenol group of tyrosine is first nitrated by nitric acid in the test solution. Then the nitrated tyrosine complexes mercury (I) and mercury (II) ions in the solution to form a pink to brick red precipitate or a solution. Some proteins containing tyrosine initially forms a white precipitate that turns red when heated, while others form a red solution immediately. Both results are considered positive.

PARAMETER	LIMIT
Description	Colourless to light greenish yellow solution.
Clarity	Clear solution with no insoluble particles
Test	Add 1ml of Millon's reagent to 1-2ml of test solution. If desired heat the solution till it boil.

Directions

- 1) Add 1ml of Millon's reagent to 1-2ml of test solution.
- 2) If desired heat the solution till it boil.
- 3) Observe the pink to brick red precipitate or solution which indicate positive test.

Results

Pink to brick red precipitate or solution	Presence of proteins (tyrosine, the only amino acid containing a phenol group)
No colour change	No colour change absence of protein

Note(s) : Assay (if applicable) method mentioned.

DANGER

Hazard statements : Fatal in contact with skin.Fatal if inhaled. Fatal if swallowed. Suspected of damaging the unborn child.May cause damage to organs through prolonged or repeated exposure by inhalation. May cause damage to organs through prolonged or repeated exposure.May be corrosive to metals. Causes severe skin burns and eye damage.Toxic to aquatic life with long lasting effects.

Precautionary statements.

Prevention : Wear protective gloves/clothing and eye/face protection.Do not get in eyes, on skin or on clothing.Wash thoroughly after handling.Wash hands thoroughly after handling.Do not breathe dust or mist.Do not breathe dust/fume/gas/mist/vapours/spray.Use only outdoors or in a well ventilated area.Wear protective gloves/clothing. Wear respiratory protection.Obtain special instructions before use.Use personal protective equipment as required.Do not handle until all safety precautions have been read and understood.Do not eat, drink or smoke when using this product.

Response :-IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.If exposed or concerned: Get medical attention advice.Keep container tightly closed.Wash contaminated clothing before reuse.IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call a POISON CENTER or doctor/physician.IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Specific treatment: refer to Label or MSDS.Get medical advice/attention if you feel unwell.If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/shower.Absorb spillage to prevent material damage.IF ON SKIN: Gently wash with plenty of soap and water.Wash/Decontaminate removed clothing before reuse. Remove/Take off immediately all contaminated clothing

IMDG Code : 8/II
UN No. : 2922
IATA : 8

Disposal: Dispose of contents and container in accordance with relevant legislation.

Hazard Pictogram(s) :-



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