

**COULTER**  
**LYSE S III diff**  
**Lytic Reagent**

[REF] 8546983  
[REF] 8546796

PN 772260-AB



**For In Vitro Diagnostic Use**

**INTENDED USE**

For use as an erythrocyte lytic agent for the quantitative determination of hemoglobin and for leukocyte counting and sizing on COULTER HmX, LH 500, LH 750, and LH 780 hematology analyzers. Use with only ISOTON III or LH Series diluent. Refer to your instrument product manuals and/or online help, as applicable.

**SUMMARY**

COULTER LYSE S III diff Lytic Reagent is used as a lytic agent to prepare a diluted whole-blood sample for the quantitative determination of hemoglobin, the enumeration of leukocytes (white blood cells), and the derivation of leukocyte subpopulations.

**PRINCIPLES**

COULTER LYSE S III diff Lytic Reagent is a clear, aqueous solution containing potassium cyanide and quaternary ammonium salts.

When the lytic reagent is added to a diluted whole-blood sample, the surface-active properties of the quaternary ammonium salts destroy the red cell membranes, thus lysing the red blood cells (stromatolysis) and releasing the hemoglobin. The released hemoglobin chemically reacts with potassium cyanide to form a stable hemochromagen that is quantitatively measured at an absorbance wavelength.

As the lytic reagent is destroying the red cell membranes to release the hemoglobin, it reduces the size of the resulting cellular debris to a level that does not interfere with the leukocyte (white blood cell) counts. On COULTER hematology analyzers with histogram differential, the lytic reagent causes differential shrinkage of the leukocytes into predictable volume components, namely lymphocytes, mononuclear cells, and granulocytes. Additionally, the reaction of the quaternary ammonium salts functions to reduce the amount of protein buildup in the sensing orifices of the instrument.

**REACTIVE INGREDIENTS**

Quaternary Ammonium Salts.....	19-26 g/L
Isopropanol.....	1-2%
Potassium Cyanide.....	0.15-0.5 g/L

**WARNINGS**

- Product contains <2% Isopropyl Alcohol and <2% Quaternary Ammonium Salts. Irritating to eyes.
- Do not inhale and/or ingest.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- DO NOT REUSE CONTAINER.

**STORAGE, STABILITY, AND DISPOSAL**

- Store COULTER LYSE S III diff Lytic Reagent at 2-30°C.
- Do not use product past expiration date.
- Use product at temperatures stated in the instrument product manuals and/or online help.
- Opened containers are stable for 60 days when stored as recommended.
- Dispose of waste product, unused product, and contaminated packaging in compliance with federal, state, and local regulations.

**PREPARATION**

COULTER LYSE S III diff Lytic Reagent is ready to use. Replace the reagent as directed in your instrument product manuals and/or online help.

**IMPORTANT:** If product has been partially or completely frozen, allow product to warm to room temperature. Mix product by gentle inversion prior to placement on the instrument. Install and prime the reagent as directed in your instrument product manuals and/or online help. Verify background counts are acceptable before analyzing patient samples.

**PRODUCT AVAILABILITY**

COULTER LYSE S III diff Lytic Reagent - 1 x 1 L

[REF] 8546983

COULTER LYSE S III diff Lytic Reagent - 1 x 5 L

[REF] 8546796

**TRADEMARKS**

Beckman Coulter logo, COULTER and LYSE S are trademarks of Beckman Coulter, Inc.; Beckman Coulter, COULTER and LYSE S are registered in the USPTO and SIPO.

For additional information, or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

 Beckman Coulter, Inc.  
250 S. Kraemer Blvd.  
Brea, CA 92821  
[www.beckmancoulter.com](http://www.beckmancoulter.com)

Printed in USA  
Made in USA

© 2011 Beckman Coulter, Inc.  
All Rights Reserved.