



HEMIGLOBINCYANIDE SOLUTION (HiCN)

FOR USE AS CALIBRATOR WITH THE HEMOGLOBIN DETERMINATION

Independent Calibrator
 Expiration date > 5 years
 Ready for use
 Liquid
 2x levels



SUMMARY

PRINCIPLES OF THE PROCEDURE

HiCN solution according the method described by Van Kampen en Zijlstra (1).

The hemiglobincyanide concentration, printed on the product label, is determined on a spectrophometer based on a millimolair extinction coefficient of 44.0 for hemiglobincyanide at a wavelength of 540 nm and a molecule weight of 64,500.

As reference preparation is used the Certified Reference Material (CRM) 552 and the 6th International Standard Haemiglobincyanide code 98/708 with a concentration of 49.8 micromoles/liter from the National institute for Biological Standards and Control, U.K.

PROCEDURE

Read the absorbance of the hemiglobincyanide solution on a spectrophotometer or filterphotometer at a wavelength of approx. 540 nm. Plot the absorbance (y-axis) versus hemoglobin concentrations (x-axis) on linear-linear graph paper. Use distilled water as a zero reference. The concentration of the measured hemoglobin concentration is known in $\mu\text{mol HiCN(Fe)/l}$. When a dilution factor of 251 is used, the corresponding hemoglobin concentration of the undiluted sample can be defined by multiply the result with 0.251.

OPTIONAL REAGENTS

Products

Products	Product no.	Quantity
Hemoglobin Reagent (Hemiglobincyanide)	2465	1 x 500 ml
Hemoglobin Reagent (Cyanide Free)	2488	1 x 500 ml

ANALYTICAL RESULTS FOR:

Product name:	Component	Concentration	Component	Concentration
Hemiglobincyanide Sol. (HiCN) Low level	HiCN (Fe)	24.4 $\mu\text{mol/l}$	Hemoglobin	6.1 mmol/l
Hemiglobincyanide Sol. (HiCN) High-Normal level	HiCN (Fe)	35.3 $\mu\text{mol/l}$	Hemoglobin	8.9 mmol/l

PRODUCTS

Products	Product no.	Quantity
Hemiglobincyanide Solution (HiCN) Low level	2457	12 x 5 ml
Hemiglobincyanide Solution (HiCN) High-Normal level	2456	12 x 5 ml



NOTES

1. For in vitro diagnostic use only.
2. For professional use only.
3. Always contact INstru**chemie** for the complete product insert and latest edition.
4. Printed in the Netherlands, July 2015 – version 3.0