

## CERTIFICATE OF ANALYSIS

Product : **BES**  
**N,N-BIS(2-HYDROXYETHYL)-2-AMINOETHANESULFONIC ACID**

Product number : B1514  
 Batch number : 012270  
 Date of analysis : 19-07-2016  
 Date of expiry : 31-07-2019

Packaging and storage : store dry in a well-closed container at room temperature

	SPECIFICATION	RESULT	UNITS	REMARKS
Appearance	white crystalline powder	complies		
Identification	conform	complies		IR-spectrum
Solubility	clear and colourless	complies		5% in H <sub>2</sub> O
pKa	6.9 – 7.3	7.1		20°C
Loss on drying	≤ 0.5	0.1	%	105°C
Residue on ignition	≤ 0.01	< 0.005	%	900°C
Chloride	≤ 0.005	complies	%	
Sulfate	≤ 0.005	complies	%	
Heavy metals	≤ 5	complies	ppm	
UV absorbance (250 nm)	≤ 0.05	0.003	AU	5% in H <sub>2</sub> O
Assay	≥ 99	99.6	%	dried substance

This certificate of analysis is conform the results of the manufacturer.

Conclusion: approved

Released by:

drs. M. van Wissen, pharmacist  
 Department of Quality Control Duchefa B.V.

Date: 21-07-2016



The buyer is responsible to test each batch to ensure the product is suitable for their specific purpose.