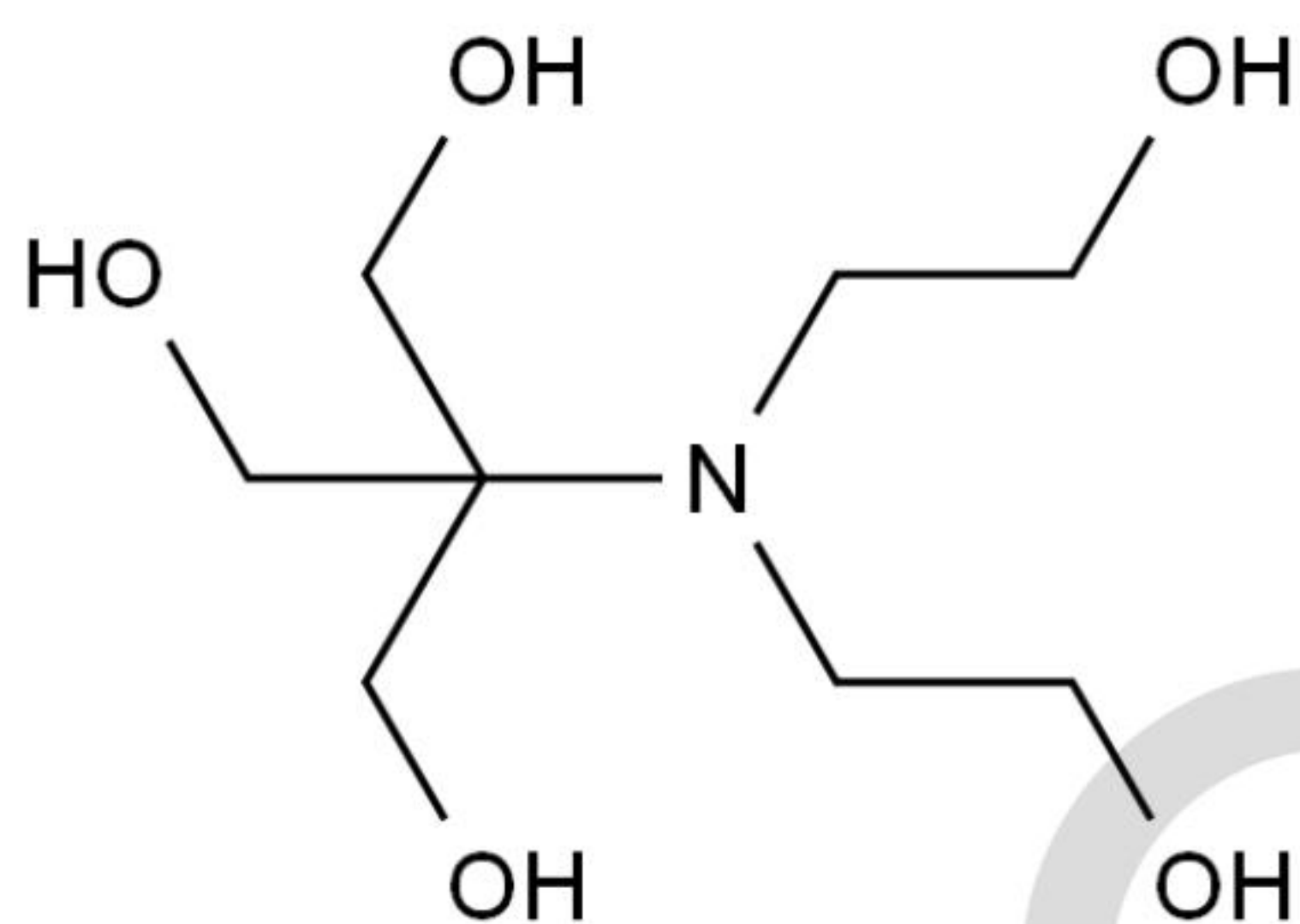


Certificate of Analysis

Reference Material & Standard

Product Name:	Bis(2-hydroxyethyl)aminotris(hydroxymethyl)methane	Catalogue Number:	CS381714
Synonyms:	N/A	Lot Number:	0809-RE-0019
CAS Number:	6976-37-0	Expiry Date:	Aug 10, 2027
Molecular Formula:	C ₈ H ₁₉ NO ₅	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	209.24		
Chemical Structure:			



Warning:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	99.889%
Loss On Drying	TGA	0.0384%
Assay		99.9%
Uncertainty		±2.0%

Comment:

- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity ELSD (\%)} / 100\%$$

Loss On Drying is considered as absolute effect, ELSD purity is considered as relative effect.
- The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Lisa

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Aug 11, 2023

Date: Aug 11, 2023

Date: Aug 11, 2023

