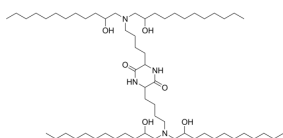


## Certificate of Analysis

**Product Name:** CKK-E12  
**Cat. No.:** CS-0149249  
**CAS No.:** 1432494-65-9  
**Batch No.:** 430519  
**Chemical Name:** 2,5-Piperazinedione, 3,6-bis[4-[bis(2-hydroxydodecyl)amino]butyl]-

### PHYSICAL AND CHEMICAL PROPERTIES

**Molecular Formula:** C<sub>60</sub>H<sub>120</sub>N<sub>4</sub>O<sub>6</sub>  
**Molecular Weight:** 993.62  
**Storage:** Storage temp. 2-8°C  
**Chemical Structure:**



### ANALYTICAL DATA

**Appearance:** Colorless to light yellow (Liquid)  
**<sup>1</sup>H NMR Spectrum:** Consistent with structure  
**Purity (NMR):** ≥98.0%  
**Conclusion:** The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA