Certificate of Analysis

LANXESS
Energizing Chemistry

Company
LANXESS Corporation
111 RIDC Park West Dr
PITTSBURGH PA 15275-1112
USA

Date: 04/05/2013

Material description
Dodecylguanidine Hydrochloride
193 KG

Material
57072649

Customer order data
Your order no.

Ship-to party

Delivery data

Delivery no.	Delivered quantity	Planned delivery date	Order no.
	2,316.000 KG	04/10/2013	

Batch	Delivered quantity
	2,316.000 KG

Results Reported as tested.

Inspection method/ Characteristic	Result	Specification	Unit
1) Appearance			
Visual			
Clear, colorless to pale yellow solution	complies	complies	
2) Conten			
HPLC			
Dodecylguanidine HCl	35.6	33.0 - 37.0	%
3) Content			
Titration			
Dodecylamine	2.2	<= 4.0	%
4) Density			
Hydrometer			
Specific gravity (@ 25°C)	0.96	0.94 - 0.98	g/ml