

Certificate of Analysis

SHANGHAI ZIJIANG INTERNATIONAL TRADING CO LTD FL 2 NO 281 WUXING ROAD 200030 SHANGHAI CHINA	Customer Order: 18ZIP-H103-0075 Ordered Quantity: 1.000 DR Shipped From: AIE US CALVERT CITY PLT Order Number: 8166763/000010 Delivery: 851761164/000010 Date Shipped: May 04, 2018 Sold To Number: 500874
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GAFQUAT 755N DRUM 215.8L 3
 Gafquat(TM) 755N polyquaternium-11
 Ashland Material Number: 828269

Batch: 0002254543

Characteristics	Specification	Results
Appearance @ 25 Deg. C- -Hazy, highly viscous liquid	PASS	PASS
+ Color (APHA, 1:1 dilution w/w with Ethanol, W580)	<= 120	20
Identification Test (Japanese MHW test & W1125) Pass equals Positive	PASS	PASS
% Solids (R.I, W1183)	19.0 - 21.0	19.9
pH (as is, W581)	6.0 - 7.0	6.0
Viscosity (cps, as is, BF, 25C, RVF/RVT @20rpm #7, W566)	25000 - 55000	45200
ppm Vinyl Pyrrolidone (GPC, W1512)	< 1000	167
ppm Heavy Metals (W719) Pass equals <=10	PASS	PASS
% Ash (Residue on Ignition or Sulphated, W720)	< 0.050	0.005
ppm Arsenic (W721) Pass equals <2.0	PASS	PASS
% Nitrogen (Solids Basis, W1161)	8.8 - 12.0	11.2
# Gram Negative Bacteria, CFU/g (Q200) Pass equals <10	PASS	PASS
# Total Aerobic Plate Count, CFU/g (Q200) Pass equals <=100	PASS	PASS
Mold/Yeast, CFU/g (Q200) Pass equals <=100	PASS	PASS
Staphylococcus aureus, CFU/g (Q200) Pass equals Negative	PASS	PASS
Salmonella, CFU/g (Q200) Pass equals Negative	PASS	PASS
E. coli, CFU/g (Q200) Pass equals Negative	PASS	PASS
Pseudomonas aeruginosa, CFU/g (Q200) Pass equals Negative	PASS	PASS

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Characteristics	Specification	Results
Date of Manufacture		April 16, 2018
Retest Date		October 15, 2019
Ordered Quantity		1.000 DR

Notes:

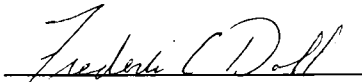
Conforms with Japanese MHW guidelines.
 + Darkens with age.
 # At the time of manufacture.

Results Certified by:

Frederic C. Doll
 Director of Quality Assurance & Systems

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GAFQUAT 755N DRUM 215.8L 3 Gafquat(TM) 755N polyquaternium-11 Ashland Material Number: 828269 Batch: 0002254543			
Characteristics		Specification	Results



Frederic C. Doll

Director of Quality Assurance & Systems

This COA is printed from a secure computer system ensuring the batch was properly released by the Quality Department and is valid with electronic signature.