

ISO 22241-1 Quality Characteristics of DEF fluid

LAB CODE: 2A0027URA

CLIENT CODE: UREA LIQUOR 32.5%

RECEIVED DATE: 10/24/2012

ALT. CODE: 760-427-4479

REPORT DATE: 10/26/2012

AR CODE: OC21031A

GRADE: N/A

REQUESTOR: PEDERSEN, R

REF NO.: N/A

CONDUCTED FOR: DEF Products
422 East Barioni Blvd.
Imperial, CA 92251

Test Completion Date	Characteristics	Unit	Limits		Results	Test methods
			min.	max.		
10/26/2012	Urea content	% (m/m)	31,8	33,2	33.0	ISO 22241-2 Annex B 33.7 ISO 22241-2 Annex C 32.4
10/24/2012	Density at 20 °C	kg/m ³	1 087,0	1 093,0	1088.9	ISO 12185
10/25/2012	Refractive index at 20 °C	—	1,381 4	1,384 3	1.38230	ISO 22241-2 Annex C
10/25/2012	Alkalinity as NH ₃	% (m/m)	—	0,2	0.01	ISO 22241-2 Annex D
10/25/2012	Biuret	% (m/m)	—	0,3	0.11	ISO 22241-2 Annex E
10/25/2012	Aldehydes	mg/kg	—	5	<0.5	ISO 22241-2 Annex F
10/25/2012	Insoluble matter	mg/kg	—	20	11.0	ISO 22241-2 Annex G
10/26/2012	Phosphate (PO ₄)	mg/kg	—	0,5	0.12	ISO 22241-2 Annex H
10/25/2012	Calcium	mg/kg	—	0,5	0.2	ISO 22241-2 Annex I
10/25/2012	Iron	mg/kg	—	0,5	<0.1	
10/25/2012	Copper	mg/kg	—	0,2	<0.1	
10/25/2012	Zinc	mg/kg	—	0,2	<0.1	
10/25/2012	Chromium	mg/kg	—	0,2	<0.1	
10/25/2012	Nickel	mg/kg	—	0,2	<0.1	
10/25/2012	Aluminum	mg/kg	—	0,5	<0.1	
10/25/2012	Magnesium	mg/kg	—	0,5	<0.1	
10/25/2012	Sodium	mg/kg	—	0,5	<0.1	
10/25/2012	Potassium	mg/kg	—	0,5	0.5	
10/25/2012	Identity	—	identical to reference		YES	

In my opinion, the testing on this report was conducted in a valid manner according to the test method listed.
Test results only apply to sample(s) provided.

Remarks:

Joe Franklin
Manager, Analytical Testing

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