



T.M.U



# Tarbiat Modares University

## Faculty of Engineering

P.O.Box : 14115-143  
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### ATOMIC ABSORPTION ANALYSIS TEST REPORT

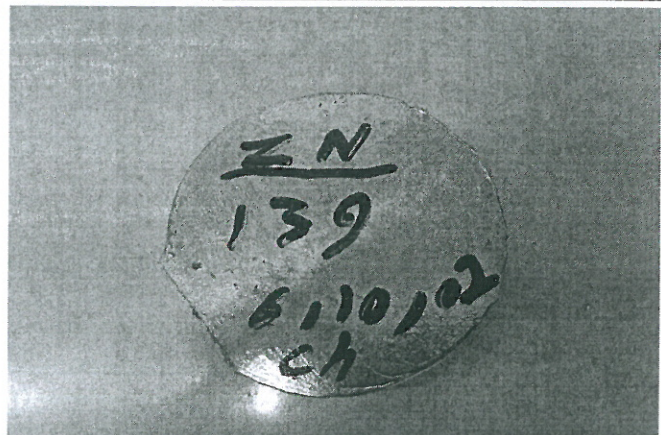
Type Of Material	Zn Sacrificial Anode
Client	Kimiakaran Kavoshgar Keihan Karoun Co. (The Selection Of The Testing Sample Has Been Done By The Client)
Date	03 Jan 2024
Report Number	1402101301

Chemical Composition				
Heat Number	Al	In	Cd	Si
139	0.396 %	...	0.050 %	...
Fe	Cu	Pb	Zn	
0.004 %	0.001 %	0.002 %	99.547 %	

Acceptance Criteria According To DNV-RP-B401 Standard			
Al	In	Cd	Si
0.10 - 0.50 %	...	0.07 % Max.	...
Fe	Cu	Pb	Zn
0.005 % Max.	0.005 % Max.	0.006 % Max.	Rem.

Corrosion & Protection Lab  
Dr. T. Shahrabi

Manager Of Corrosion  
& Protection Lab





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### ELECTROCHEMICAL TEST REPORT

Type Of Material	Zn Sacrificial Anode
Client	Kimiakaran Kavoshgar Keihan Karoun Co. (The Selection Of The Testing Sample Has Been Done By The Client)
Date	03 Jan 2024
Report Number	1402101302
Initial Anode Specimen Weight	28.3798 g
Final Anode Specimen Weight	24.9541 g

Electrochemical Properties				
Heat Number	Closed Circuit Potential(V)	Open Circuit Potential(V)	Electrochemical Capacity(A-h/kg)	Consumption Rate(kg/A-yr)
139	-1.03	-1.09	814	10.76

Acceptance Criteria According To DNV-RP-B401 & BS 7361 Standards			
Closed Circuit Potential(V)	Open Circuit Potential(V)	Electrochemical Capacity(A-h/kg)	Consumption Rate(kg/A-yr)
-1.00 or more negative vs. Ag/AgCl/seawater reference electrode	-1.05 or more negative vs. Ag/AgCl/seawater reference electrode	780 min	11.23 max

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Manager Of Corrosion  
& Protection, RABBI



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Test Conditions Maintained Throughout The Test Cycle	
pH	8.2
Resistivity	30 ohm-cm
Temperature	20 ± 3°C
Test Duration	96 h
Anode Specimen Current Output On The First Day	23.5 mA
Anode Specimen Current Output On The Second Day	6.28 mA
Anode Specimen Current Output On The Third Day	62.8 mA
Anode Specimen Current Output On The Forth Day	23.5 mA
Saturated With Oxygen	

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