

MARKETS AND PROFITABILITY

Market Insights: Ethanolamines - 2022

June 2022



This Report was prepared by NexantECA, the Energy and Chemicals Advisory company ("NexantECA"). Except where specifically stated in this Report, the information contained herein is prepared on the basis of information that is publicly available, and contains no confidential third party technical information to the best knowledge and belief of NexantECA. The information has not been independently verified or otherwise examined to determine its accuracy, completeness or financial feasibility. Neither NexantECA, Subscriber nor any person acting on behalf of either shall have any liabilities for any loss or damage arising from or connected to the use of any information contained in this Report. NexantECA does not represent or warrant that any assumed conditions will come to pass.

The Report is for Subscriber's internal use only and shall be kept strictly confidential. The Report should not be otherwise reproduced, distributed or used without first obtaining prior written consent by NexantECA. Each Subscriber agrees to use reasonable effort to protect the confidential nature of the Report.

Copyright © by NexantECA (BVI) Ltd. 2022. All rights reserved.



Contents

1	Executive Summary	1
2	Introduction.....	4
2.1	Overview	4
2.2	Key End-Use Markets for Ethanolamines	5
2.2.1	Surfactants and Detergents	5
2.2.2	Herbicides and Pesticides.....	6
2.2.3	Ethylene Amines	6
2.2.4	Gas Treatment	6
2.2.5	Metalworking and Corrosion Inhibitors.....	6
2.2.6	Textile Additives	7
2.2.7	Wood Preservation.....	7
2.2.8	Others.....	7
2.3	Products and Specifications.....	8
3	Market Outlook	10
3.1	Global	10
3.1.1	Market Overview	10
3.1.2	Market Drivers	14
3.1.3	Competitive Landscape.....	20
3.1.4	Supply Demand and Trade	22
3.1.5	Pricing Analysis and Trends.....	23
3.2	Asia Pacific (Excluding China)	26
3.2.1	Market Overview	26
3.2.2	Competitive Landscape.....	27
3.2.3	Supply, Demand and Trade	29
3.3	China	30
3.3.1	Market Overview	30
3.3.2	Competitive Landscape.....	32
3.3.3	Supply, Demand and Trade	34
3.4	North America	35
3.4.1	Market Overview	35
3.4.2	Competitive Landscape.....	37
3.4.3	Supply, Demand and Trade	38
3.5	South America.....	39
3.5.1	Market Overview	39
3.5.2	Competitive Landscape.....	40
3.5.3	Supply, Demand and Trade	41
3.6	Western Europe	42
3.6.1	Market Overview	42
3.6.2	Competitive Landscape.....	44
3.6.3	Supply, Demand and Trade	45
3.7	Central Europe	46
3.7.1	Market Overview	46



3.7.2	Competitive Landscape.....	47
3.7.3	Supply, Demand and Trade	48
3.8	Eastern Europe	49
3.8.1	Market Overview	49
3.8.2	Competitive Landscape.....	50
3.8.3	Supply, Demand and Trade	51
3.9	Middle East.....	52
3.9.1	Market Overview	52
3.9.2	Competitive Landscape.....	54
3.9.3	Supply, Demand and Trade	55
3.10	Africa	56
3.10.1	Market Overview	56
3.10.2	Competitive Landscape.....	57
3.10.3	Supply, Demand and Trade	58
4	Cost Competitiveness	59
4.1	Cost Structure and Assumptions.....	59
4.1.1	Variable Costs	60
4.1.2	Direct Fixed Costs	62
4.1.3	Allocated Fixed Costs	63
4.1.4	Other Considerations	63
4.2	Delivered Cost Assumptions	64
4.2.1	Packaging.....	64
4.2.2	Shipping Costs	64
4.2.3	Tariffs	65
4.3	Delivered Cost Competitiveness	66
5	Market Summary	67

Figures

Figure 1	EOA Value Chain	4
Figure 2	Global Ethanolamines Demand by End-Use.....	10
Figure 3	Ethanolamines Global Consumption Growth by Application.....	11
Figure 4	Global Ethanolamines Demand by Grade	12
Figure 5	Global Ethanolamines Demand by Region	13
Figure 6	Ethanolamine Consumption by Region – Herbicides and Pesticides	15
Figure 7	Ethanolamine Consumption by Region – Ethyleneamines	16
Figure 8	Ethanolamine Consumption by Region – Gas Treatment.....	17
Figure 9	Ethanolamine Consumption by Region – Metal Working and Cleaning	18
Figure 10	Ethanolamine Consumption by Region – Textile	19
Figure 11	Ethanolamine Consumption by Region – Wood Preservation	19
Figure 12	Global Ethanolamines Capacity by Region	20
Figure 13	Global Ethanolamines Capacity by Producer.....	21
Figure 14	Global Ethanolamines Supply and Demand.....	22
Figure 15	South-East Asia Ethanolamines Prices	23
Figure 16	South-East Asia Ethanolamines Cost, Price and Margin Projection	24
Figure 17	Ethanolamines (Light Distribution) Pricing by Key Region.....	25
Figure 18	Ethanolamines Consumption by End-Use, Asia Pacific (Excluding China)	26



Figure 19	Ethanolamines Consumption by Grade, Asia Pacific (Excluding China)	27
Figure 20	Ethanolamines Supply and Demand Analysis, Asia Pacific (Excl. China)	29
Figure 21	Ethanolamines Consumption by End-Use, China	31
Figure 22	Ethanolamines Consumption by Grade, China	31
Figure 23	Ethanolamines Supply and Demand Analysis, China	34
Figure 24	Ethanolamines Demand by End-Use, North America	35
Figure 25	Ethanolamines Demand by Grade, North America	36
Figure 26	Ethanolamines Supply and Demand Analysis, North America	38
Figure 27	Ethanolamines Consumption by End-Use, South America	39
Figure 28	Ethanolamines Consumption by Grade, South America	40
Figure 29	Ethanolamines Supply and Demand Analysis, South America	41
Figure 30	Ethanolamines Consumption by End-Use, Western Europe	42
Figure 31	Ethanolamines Consumption by End-Use, Western Europe	43
Figure 32	Ethanolamines Supply and Demand Analysis, Western Europe	45
Figure 33	Ethanolamines Consumption by End-Use, Central Europe	46
Figure 34	Ethanolamines Consumption by Grade, Central Europe	47
Figure 35	Ethanolamines Supply and Demand Analysis, Central Europe	48
Figure 36	Ethanolamines Consumption by End-Use, Eastern Europe	49
Figure 37	Ethanolamines Consumption by Grade, Eastern Europe	50
Figure 38	Ethanolamines Supply and Demand Analysis, Eastern Europe	51
Figure 39	Ethanolamines Consumption by End-Use, Middle East	52
Figure 40	Ethanolamines Consumption by Grade, Middle East	53
Figure 41	Ethanolamines Supply and Demand Analysis, Middle East	55
Figure 42	Ethanolamines Supply and Demand Analysis, Middle East	55
Figure 43	Ethanolamines Consumption by End-Use, Africa	56
Figure 44	Ethanolamines Consumption by Grade, Africa	57
Figure 45	Ethanolamines Supply and Demand Analysis, Africa	58
Figure 46	Components of Delivered Cost to Market	59
Figure 47	Mixed Ethanolamines Delivered Cost to China	66
Figure 48	Porter 5 Force Analysis of Ethanoamines Production	67

Tables

Table 1	Products and Specifications	9
Table 2	Global Ethanolamines Consumption by Sector	12
Table 3	Global Ethanolamines Consumption by Region	13
Table 4	Ethanolamine Consumption by Region – Surfactants and Detergents	14
Table 5	Global Ethanolamines Supply and Demand	22
Table 6	Ethanolamines Demand by End-Use, Asia Pacific (Excluding China)	27
Table 7	Asia Pacific (excl. China) Ethanolamines Capacity	28
Table 8	Ethanolamines Supply and Demand Analysis, Asia Pacific (Excl. China)	29
Table 9	Ethanolamines Consumption by End-Use, China	31
Table 10	Ethanolamines Capacity in China	33
Table 11	Ethanolamine Supply and Demand Analysis, China	34
Table 12	Ethanolamines Demand by End-Use, North America	35
Table 13	Ethanolamines Capacity, North America	37



Table 14	Ethanolamines Supply and Demand Analysis, North America	38
Table 15	Ethanolamines Consumption by End-Use, South America.....	39
Table 16	Ethanolamines Capacity, South America	40
Table 17	Ethanolamines Supply and Demand Analysis, South America.....	41
Table 18	Ethanolamines Consumption by End-Use, Western Europe	42
Table 19	Ethanolamines Capacity in Western Europe.....	44
Table 20	Ethanolamines Supply and Demand Analysis, Western Europe	45
Table 21	Ethanolamines Consumption by End-Use, Central Europe	46
Table 22	Ethanolamines Supply and Demand Analysis, Central Europe	48
Table 23	Ethanolamines Consumption by End-Use, Eastern Europe	49
Table 24	Ethanolamines Capacity in Eastern Europe.....	50
Table 25	Ethanolamines Supply and Demand Analysis, Eastern Europe	51
Table 26	Ethanolamines Consumption by End-Use, Middle East.....	52
Table 27	Ethanolamines Capacity in Middle East	54
Table 28	Ethanolamines Consumption by End-Use, Africa	56
Table 29	Ethanolamines Supply and Demand Analysis, Africa	58
Table 30	Feedstock Price Assumptions	60
Table 31	Utility Rates	61
Table 32	Wage Assumptions.....	62
Table 33	Packaging and Freight Costs, Delivered to China	64
Table 34	Tariffs Due on Imports into China.....	65