

MARKETS AND PROFITABILITY

Market Analytics: Formaldehyde - 2023

Methanol Derivatives

March 2023



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. 2023. All rights reserved.



Contents

1	Executive Summary	5
1.1	Formaldehyde	5
2	Introduction	7
2.1	The Methanol Industry	7
2.2	Formaldehyde	7
2.3	Market Coverage.....	7
3	Formaldehyde.....	9
3.1	Global	9
3.1.1	Key Developments	9
3.1.2	Demand.....	9
3.1.3	Supply	13
3.1.4	Supply, Demand and Trade	14
3.2	North America	16
3.2.1	Demand.....	16
3.2.2	Supply	18
3.2.3	Supply, Demand and Trade	18
3.3	South America.....	20
3.3.1	Demand.....	20
3.3.2	Supply	21
3.3.3	Supply, Demand and Trade	22
3.4	Western Europe	23
3.4.1	Demand.....	23
3.4.2	Supply	24
3.4.3	Supply, Demand and Trade	25
3.5	Central Europe	26
3.5.1	Demand.....	26
3.5.2	Supply	27
3.5.3	Supply, Demand and Trade	28
3.6	Eastern Europe	29
3.6.1	Demand.....	29
3.6.1.1	Russia	29
3.6.1.2	Other Eastern Europe	30
3.6.2	Supply	30
3.6.2.1	Russia	30
3.6.3	Supply, Demand and Trade	31
3.6.3.1	Russia	31
3.6.3.2	Other Eastern Europe	32
3.7	Middle East.....	34
3.7.1	Demand.....	34
3.7.2	Supply	35
3.7.3	Supply, Demand and Trade	36



3.8	Africa	37
3.8.1	Demand.....	37
3.8.2	Supply	38
3.8.3	Supply, Demand and Trade	39
3.9	Asia Pacific.....	40
3.9.1	Demand.....	40
3.9.1.1	China.....	40
3.9.1.2	North-East Asia.....	41
3.9.1.3	South-East Asia	41
3.9.1.4	South Asia.....	41
3.9.1.5	Australasia	42
3.9.2	Supply	43
3.9.2.1	China.....	43
3.9.2.2	South Asia.....	44
3.9.3	Supply, Demand and Trade	45

Appendices

A	Methodology	47
A.1	Market Dynamics Forecasting Methodology	47
A.1.1	Capacity Availability and Forecasting	47
A.1.2	End-Use Consumption Forecasting	47
A.1.2.1	End-Use Sector Growth	48
A.1.2.2	Penetration (New Application Growth).....	48
A.1.2.3	Short-term Influences.....	49
A.1.3	Monomer Consumption Forecasting.....	49
A.1.4	Production and Trade Forecasting.....	50
B	The Methanol Industry – Technology.....	51
B.1	Formaldehyde	51

Figures

Figure 1	Global Formaldehyde Demand, 2022-e	11
Figure 2	Global GDP Growth vs. Formaldehyde Consumption Growth	11
Figure 3	Global Formaldehyde Consumption	12
Figure 4	Global Formaldehyde Capacity Additions/(Closures)	13
Figure 5	Global Formaldehyde Capacity	13
Figure 6	Global Formaldehyde Supply and Demand	14
Figure 7	Global Formaldehyde Supply and Demand	14
Figure 8	Regional Formaldehyde Exports/Imports	15
Figure 9	North America Formaldehyde Demand, 2022-e	17
Figure 10	North America Formaldehyde Supply, Demand and Trade	18
Figure 11	United States Formaldehyde Supply, Demand and Trade.....	19
Figure 12	South America Formaldehyde Demand, 2022-e.....	21



Figure 13	South America Formaldehyde Supply, Demand and Trade.....	22
Figure 14	Western Europe Formaldehyde Demand, 2022-e	24
Figure 15	Western Europe Formaldehyde Supply, Demand and Trade	25
Figure 16	Central Europe Formaldehyde Demand, 2022-e	27
Figure 17	Central Europe Formaldehyde Supply, Demand and Trade	28
Figure 18	Russia Formaldehyde Demand, 2022-e.....	29
Figure 19	Other Eastern Europe Formaldehyde Demand, 2022-e	30
Figure 20	Russia Formaldehyde Supply, Demand and Trade	31
Figure 21	Other Eastern Europe Formaldehyde Supply, Demand and Trade	32
Figure 22	Total Eastern Europe Formaldehyde Supply, Demand and Trade	33
Figure 23	Middle East Formaldehyde Demand, 2022-e.....	35
Figure 24	Middle East Formaldehyde Supply, Demand and Trade	36
Figure 25	Africa Formaldehyde Demand, 2022-e	37
Figure 26	Africa Formaldehyde Supply, Demand and Trade	39
Figure 27	Asia Pacific Formaldehyde Demand, 2022-e	42
Figure 28	Asia Pacific Formaldehyde Supply, Demand and Trade.....	45
Figure 29	China Formaldehyde Supply, Demand and Trade	46
Figure 30	End-Use Consumption Drivers	48
Figure 31	Monomer Consumption Drivers	49
Figure 32	Trade Considerations	50

Tables

Table 1	Global Consumption by Derivative	11
Table 2	Global Formaldehyde Consumption by Region.....	12
Table 3	North America Formaldehyde Consumption by Derivative	17
Table 4	North America Formaldehyde Consumption by Country.....	17
Table 5	North America Formaldehyde Supply, Demand and Trade	18
Table 6	United States America Formaldehyde Supply, Demand and Trade	19
Table 7	South America Formaldehyde Consumption by Derivative.....	21
Table 8	South America Formaldehyde Consumption by Country	21
Table 9	South America Formaldehyde Supply, Demand and Trade.....	22
Table 10	Western Europe Formaldehyde Consumption by Derivative	24
Table 11	Western Europe Formaldehyde Supply, Demand and Trade	25
Table 12	Central Europe Formaldehyde Consumption by Derivative	27
Table 13	Central Europe Formaldehyde Supply, Demand and Trade	28
Table 14	Russia Formaldehyde Consumption by Derivative	29
Table 15	Other Eastern Europe Formaldehyde Consumption by Derivative	30
Table 16	Russia Formaldehyde Supply, Demand and Trade	31
Table 17	Other Eastern Europe Formaldehyde Supply, Demand and Trade	32
Table 18	Total Eastern Europe Formaldehyde Supply, Demand and Trade	33
Table 19	Middle East Formaldehyde Consumption by Derivative	35
Table 20	Middle East Formaldehyde Consumption by Country	35
Table 21	Middle East Formaldehyde Supply, Demand and Trade	36
Table 22	Africa Formaldehyde Consumption by Derivative	37



Table 23	Africa Formaldehyde Consumption by Country	38
Table 24	Africa Formaldehyde Supply, Demand and Trade	39
Table 25	Asia Pacific Formaldehyde Consumption by Derivative.....	42
Table 26	Asia Pacific Formaldehyde Consumption by Country	43
Table 27	Asia Pacific Formaldehyde Supply, Demand and Trade.....	45
Table 28	China Formaldehyde Supply, Demand and Trade	46