

Buy EUR 35.00 Price EUR 23.50 Upside 48.9 %	Value Indicators: EUR DCF: 35.09 FCF-Value Potential 21-23: 35.67 SotP 21-23: 39.76	Warburg ESG Risk Score: 2.4 ESG Score (MSCI based): 3.0 Balance Sheet Score: 3.3 Market Liquidity Score: 1.0	Description: Alzchem is an integrated specialty chemicals provider
	Market Snapshot: EUR m Market cap: 238.2 No. of shares (m): 10.1 EV: 415.8 Freefloat MC: 113.2 Ø Trad. Vol. (30d): 103.88 th	Shareholders: Freefloat 47.5 % LIVIA Corporate Development 25.0 % for two na GmbH 15.1 % HDI Vier CE GmbH 12.0 %	Key Figures (WRe): 2021e Beta: 1.5 Price / Book: 2.8 x Equity Ratio: 23 % Net Fin. Debt / EBITDA: 0.5 x Net Debt / EBITDA: 2.8 x

Strong demand commencing

Stated Figures Q3/2021:						Comment on Figures:	
	Q3 2021	yoy	Q3 2021e	Q3 2020	Consensus		
Sales Group	95.92	17.9%	97.991	81.373	98		
thereof Specialty Chemicals	47.116	9.6%	48.584	42.995			Q3 P&L figures were in line with both consensus and WR estimates
Basics & Intermediates	42.465	31.4%	42.986	32.32			Specialty Chemicals continued to benefit from strong demand, namely for DYHARD hardener for prepreps, NIGU® Nitroguanidin and Creapure® food supplements. Bioselect® continued to face declining demand due the change in Covid-19 testing regimes regarding PCR test in many regions. The segment experienced increasing headwinds from raw-material price increases, thus yoy earnings progression slowed sequentially.
Other & Holding	6.339	4.6%	6.421	6.058			
EBITDA Group	13.838	15.4%	13.586	11.987	14		
EBITDA margin	14.4%		13.9%	14.7%			
thereof Specialty Chemicals	10.096	7.2%	10.657	9.418			
Basics & Intermediates	3.118	55.4%	2.579	2.006			
Other & Holding	0.512	41.8%	0.45	0.361			
Consolidation	0.112	n.m.	-0.1	0.202			
EBIT Group	7.632	20.8%	7.686	6.318	7.5		
Net profit	4.733	24.4%	5.198	3.805	4.8		
Eps	0.46	24.3%	0.51	0.37	0.47		

Sales continued to expand in Q3 2021 mostly as a result of higher volumes (+16.1% yoy) and higher prices (+2.0% yoy). As the EBITDA margin was almost flat at 14.4% yoy despite rising raw-material costs, net earnings expanded significantly. The only fly in the ointment was FCF generation in Q3 2021, which was EUR -6.04m (Q3 2020: EUR 15.67m). This was triggered by substantially higher working capital requirements (an increase of EUR 11.79m versus a release of EUR 12.35m in Q3 2020). This reflected higher demand but also raw-material costs as well as higher inventories as a safety measure to prevent raw material bottlenecks in production and packaging. While we expect some of that to revert in Q4 2021 (especially in trade payables), WC needs seem to be higher than we had anticipated originally. In addition, pension provisions increased, contrary to our assumptions, as Alzchem raised its stance on annual pension increases from 1.5% to 2.0%.

We reiterate our Buy rating as well as our PT of EUR 35 (based on a DCF calculation).

Changes in Estimates:						Comment on Changes:	
FY End: 31.12. in EUR m	2021e (old)	+ / -	2022e (old)	+ / -	2023e (old)	+ / -	
Sales	416.3	-0.5 %	441.1	-0.5 %	460.9	-0.5 %	
EBIT	38.6	-0.1 %	44.2	0.0 %	45.6	0.0 %	
EPS	2.44	-0.1 %	2.84	0.6 %	2.97	1.1 %	
DPS	0.99	-14.1 %	1.14	-11.9 %	1.19	-7.3 %	
Net Debt	159.7	11.2 %	150.0	6.8 %	140.7	6.3 %	

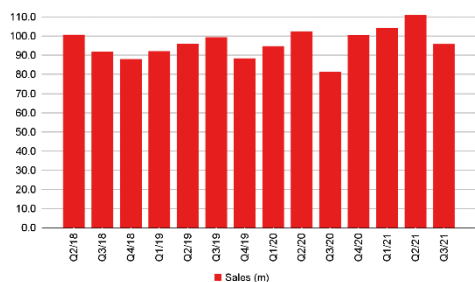


Rel. Performance vs CDAX:	
1 month:	0.0 %
6 months:	-12.4 %
Year to date:	-5.0 %
Trailing 12 months:	-7.5 %

Company events:	

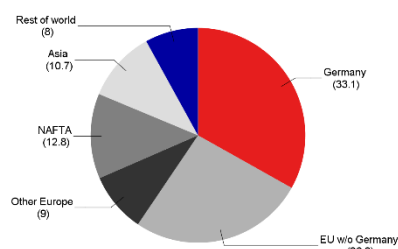
FY End: 31.12. in EUR m	CAGR (20-23e)	2017	2018	2019	2020	2021e	2022e	2023e
Sales	6.5 %	353.9	375.2	376.1	379.3	414.2	438.9	458.6
Change Sales yoy		8.2 %	6.0 %	0.2 %	0.8 %	9.2 %	5.9 %	4.5 %
Gross profit margin		61.5 %	60.0 %	60.8 %	64.4 %	64.1 %	64.8 %	64.6 %
EBITDA	9.8 %	44.0	49.4	50.1	53.8	62.7	69.0	71.2
Margin		12.4 %	13.2 %	13.3 %	14.2 %	15.1 %	15.7 %	15.5 %
EBIT	14.1 %	30.0	34.2	30.6	30.7	38.6	44.2	45.6
Margin		8.5 %	9.1 %	8.1 %	8.1 %	9.3 %	10.1 %	10.0 %
Net income	15.6 %	19.0	22.7	18.0	19.7	24.7	29.0	30.4
EPS	15.7 %	1.87	2.23	1.77	1.94	2.43	2.86	3.00
EPS adj.	15.7 %	1.87	2.23	1.77	1.94	2.43	2.86	3.00
DPS	12.6 %	0.00	0.90	0.75	0.77	0.85	1.00	1.10
Dividend Yield		n.a.	3.2 %	3.5 %	3.9 %	3.6 %	4.3 %	4.7 %
FCF		0.57	-0.51	0.23	1.95	1.70	3.00	2.38
FCF / Market cap		0.5 %	-1.8 %	1.1 %	9.9 %	7.2 %	12.8 %	10.1 %
EV / Sales		3.6 x	1.2 x	1.1 x	1.0 x	1.0 x	0.9 x	0.8 x
EV / EBITDA		29.3 x	9.0 x	8.1 x	7.2 x	6.6 x	5.8 x	5.4 x
EV / EBIT		42.9 x	13.0 x	13.2 x	12.6 x	10.8 x	9.0 x	8.5 x
P / E		60.7 x	12.8 x	12.0 x	10.2 x	9.7 x	8.2 x	7.8 x
P / E adj.		60.7 x	12.8 x	12.0 x	10.2 x	9.7 x	8.2 x	7.8 x
FCF Potential Yield		1.8 %	5.9 %	6.4 %	7.9 %	8.7 %	10.1 %	10.8 %
Net Debt		135.8	155.0	188.3	185.4	177.6	160.1	149.6
ROCE (NOPAT)		11.1 %	11.7 %	9.2 %	8.9 %	10.6 %	11.9 %	12.0 %
Guidance:	FY 2021: EBITDA strongly rising to up to EUR 64m							

Sales development
in EUR m



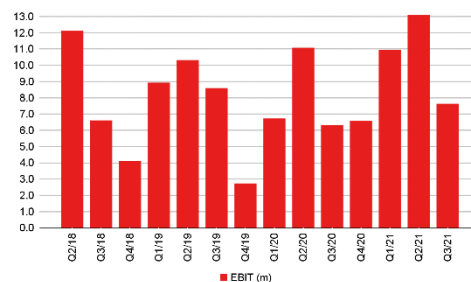
Source: Warburg Research

Sales by regions
2020; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

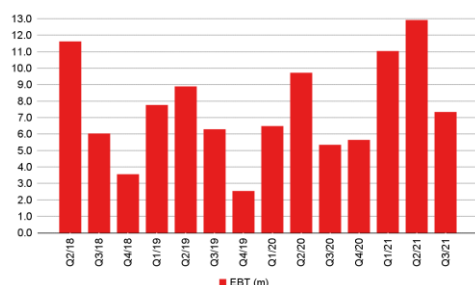
Company Background

- Alzchem goes back to the Bayerische Stickstoff-Werke GmbH (1908), which built a large calcium carbide and calcium cyanamide plant on the river Alz
- In 1939, Bayerische Kraftwerk AG and Donauwerke AG merged to form Süddeutsche Kalkstickstoffe AG, based in Trostberg. In 1978 company's name was changed to SKW Trostberg AG
- Merger of Degussa Hüls AG with Trostberg AG to form Degussa AG in 2000. Merger of the Alz locations Trostberg, Schalchen, Hart and Waldkraiburg into AlzChem Holding GmbH in 2006
- Conversion to AlzChem AG 2011, takeover by bluO in 2013. In 2019 the company heavily invested in the area of feed additives with the construction of a dedicated CreAMINO® production facility
- AlzChem is brought into the listed Alzchem Group AG (formerly Softmatic AG). Alzchem Group AG is the new parent company of the Alzchem Group. 2019 Commissioning of investment projects Creamino® and Nitrile

Competitive Quality

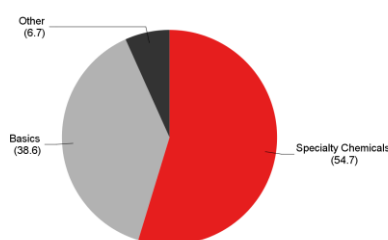
- Alzchem is a globally active, vertically integrated manufacturer of various chemical products of the calcium carbide/calcium cyanamide chain with a strategic focus on growth in the Specialty Chemicals business segment
- Alzchem's integrated manufacturing "Verbund" system enables efficiency gains in production. The company is the global leader or among the leading companies in its chosen fields of activity
- The company has four production facilities in Germany and one in Sweden that are complemented by two marketing companies in the US and in China allowing for global distribution of its products
- The company is benefiting from megatrends like sustainable energy production, population growth and increase in aging population. Its products offer attractive solutions that meet demand growth.
- Alzchem provides a highly diversified product portfolio ranging e.g. from dietary supplements, plant growth regulators to precursors for corona testing, thus addressing a wide range of customer industries

EBT development
in EUR m



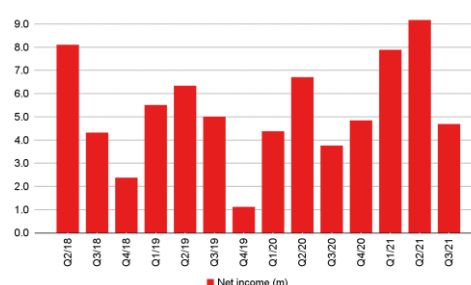
Source: Warburg Research

Sales by segments
2020; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	
Sales	414.2	438.9	458.6	476.9	495.5	514.3	533.4	552.6	571.9	590.8	609.1	626.8	643.7	1.0 %
Sales change	9.2 %	5.9 %	4.5 %	4.0 %	3.9 %	3.8 %	3.7 %	3.6 %	3.5 %	3.3 %	3.1 %	2.9 %	2.7 %	
EBIT	38.6	44.2	45.6	44.5	45.7	47.4	49.2	51.0	52.8	54.5	56.2	57.8	59.4	
EBIT-margin	9.3 %	10.1 %	10.0 %	9.3 %	9.2 %	9.2 %	9.2 %	9.2 %	9.2 %	9.2 %	9.2 %	9.2 %	9.2 %	
Tax rate (EBT)	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	
NOPAT	27.4	31.4	32.4	31.6	32.4	33.7	34.9	36.2	37.5	38.7	39.9	41.0	42.2	
Depreciation	24.2	24.8	25.6	27.1	28.6	29.7	30.8	31.9	33.0	34.1	35.2	36.2	37.2	
in % of Sales	5.8 %	5.7 %	5.6 %	5.7 %	5.8 %	5.8 %	5.8 %	5.8 %	5.8 %	5.8 %	5.8 %	5.8 %	5.8 %	
Changes in provisions	1.5	4.3	3.3	6.0	6.1	6.2	6.3	6.3	6.4	6.2	6.0	5.8	5.6	
Change in Liquidity from														
- Working Capital	13.3	-2.9	3.0	6.1	6.3	4.0	4.0	4.1	4.1	4.0	3.9	3.8	3.6	
- Capex	30.0	30.0	31.5	31.0	31.7	32.4	33.1	33.7	34.3	35.4	36.5	37.6	38.6	
Capex in % of Sales	7.2 %	6.8 %	6.9 %	6.5 %	6.4 %	6.3 %	6.2 %	6.1 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	9.8	33.3	26.8	27.6	29.1	33.2	34.9	36.6	38.4	39.6	40.7	41.7	42.7	42
PV of FCF	9.7	30.8	23.1	22.1	21.7	23.0	22.4	21.9	21.4	20.5	19.6	18.7	17.8	270
share of PVs	11.72 %			38.49 %										49.78 %

Model parameter

Derivation of WACC:

Debt ratio	36.00 %
Cost of debt (after tax)	3.6 %
Market return	7.00 %
Risk free rate	1.50 %

WACC 7.52 %

Derivation of Beta:

Financial Strength	1.50
Liquidity (share)	2.00
Cyclicality	1.50
Transparency	1.50
Others	1.00

Beta 1.50

Valuation (m)

Present values 2033e

Terminal Value	270
Financial liabilities	61
Pension liabilities	142
Hybrid capital	0
Minority interest	2
Market val. of investments	0
Liquidity	17

Equity Value 356

No. of shares (m) 10.1

Value per share (EUR) 35.09

Sensitivity Value per Share (EUR)

		Terminal Growth									Delta EBIT-margin						
Beta	WACC	0.25 %	0.50 %	0.75 %	1.00 %	1.25 %	1.50 %	1.75 %	Beta	WACC	-0.8 pp	-0.5 pp	-0.3 pp	+0.0 pp	+0.3 pp	+0.5 pp	+0.8 pp
1.78	8.5 %	25.79	26.38	27.00	27.66	28.38	29.14	29.96	1.78	8.5 %	23.75	25.05	26.36	27.66	28.97	30.28	31.58
1.64	8.0 %	28.85	29.55	30.30	31.11	31.97	32.90	33.91	1.64	8.0 %	26.91	28.31	29.71	31.11	32.51	33.91	35.31
1.57	7.8 %	30.53	31.31	32.13	33.02	33.98	35.01	36.13	1.57	7.8 %	28.67	30.12	31.57	33.02	34.48	35.93	37.38
1.50	7.5 %	32.34	33.19	34.10	35.09	36.15	37.30	38.55	1.50	7.5 %	30.56	32.07	33.58	35.09	36.60	38.10	39.61
1.43	7.3 %	34.27	35.21	36.23	37.32	38.50	39.79	41.19	1.43	7.3 %	32.61	34.18	35.75	37.32	38.89	40.46	42.03
1.36	7.0 %	36.35	37.39	38.52	39.74	41.06	42.51	44.09	1.36	7.0 %	34.83	36.47	38.10	39.74	41.37	43.01	44.64
1.22	6.5 %	41.02	42.31	43.71	45.24	46.91	48.75	50.79	1.22	6.5 %	39.89	41.67	43.46	45.24	47.03	48.81	50.60

- The beta value Beta value reflects the limited liquidity of the share (Free float 47.5%)
- In addition, transparency is reduced for structural reasons as Alzchem is positioned as a B2B company

Free Cash Flow Value Potential

Warburg Research's valuation tool "FCF Value Potential" reflects the ability of the company to generate sustainable free cash flows. It is based on the "FCF potential" - a FCF "ex growth" figure - which assumes unchanged working capital and pure maintenance capex. A value indication is derived via the perpetuity of a given year's "FCF potential" with consideration of the weighted costs of capital. The fluctuating value indications over time add a timing element to the DCF model (our preferred valuation tool).

in EUR m	2017	2018	2019	2020	2021e	2022e	2023e	
Net Income before minorities	19.2	22.8	18.1	19.9	24.8	29.1	30.6	
+ Depreciation + Amortisation	14.0	15.2	19.5	23.1	24.2	24.8	25.6	
- Net Interest Income	-2.1	-2.2	-2.6	-2.1	-2.1	-1.7	-1.3	
- Maintenance Capex	12.4	14.0	14.5	14.7	15.0	15.3	15.8	
+ Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
= Free Cash Flow Potential	22.8	26.2	25.8	30.4	36.1	40.4	41.7	
FCF Potential Yield (on market EV)	1.8 %	5.9 %	6.4 %	7.9 %	8.7 %	10.1 %	10.8 %	
WACC	7.52 %	7.52 %	7.52 %	7.52 %	7.52 %	7.52 %	7.52 %	
= Enterprise Value (EV)	1,288.8	444.4	404.4	387.2	415.8	398.3	387.7	
= Fair Enterprise Value	303.7	348.5	342.8	404.3	479.8	537.4	554.7	
- Net Debt (Cash)	43.6	43.6	43.6	43.6	34.3	12.6	-1.3	
- Pension Liabilities	141.8	141.8	141.8	141.8	143.3	147.6	150.9	
- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Market value of minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
+ Market value of investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
= Fair Market Capitalisation	118.3	163.1	157.4	218.9	302.1	377.2	405.2	
Number of shares, average	10.2	10.2	10.2	10.2	10.1	10.1	10.1	
= Fair value per share (EUR)	11.62	16.02	15.47	21.51	29.81	37.22	39.97	
premium (-) / discount (+) in %					26.9 %	58.4 %	70.1 %	
Sensitivity Fair value per Share (EUR)								
WACC	10.52 %	3.12	6.28	5.88	10.22	16.31	22.10	24.36
	9.52 %	5.37	8.86	8.42	13.21	19.86	26.08	28.47
	8.52 %	8.15	12.05	11.56	16.91	24.25	31.00	33.55
	7.52 %	11.67	16.09	15.53	21.59	29.81	37.22	39.97
	6.52 %	16.26	21.36	20.72	27.71	37.07	45.35	48.37
	5.52 %	22.53	28.55	27.79	36.05	46.97	56.44	59.81
	4.52 %	31.56	38.92	37.99	48.08	61.24	72.42	76.32

■ Historical volatility of the value indication is due to cyclical operative development

Sum of the parts

€ m	Sales			EBITDA*			EBITDA-Margin			EBITDA (x)			Fair value (calc.)		
	2021e	2022e	2023e	2021e	2022e	2023e	2021e	2022e	2023e	2021e	2022e	2023e	2021e	2022e	2023e
Specialty Chemicals	219.24	235.14	249.25	49.13	55.83	59.11	0.22	0.24	0.24	10.12	9.32	8.67	497.27	520.44	512.52
Basics & Intermediates	169.35	177.81	183.15	12.27	11.56	10.27	0.07	0.07	0.06	4.31	4.29	4.58	52.92	49.58	47.01
Other & Holding	25.66	25.91	26.17	1.35	1.81	1.83	0.05	0.07	0.07	6.74	6.33	6.00	9.09	11.49	10.98
Consolidation	0.00	0.00	0.00	-0.03	-0.20	0.00	n.m.	n.m.	n.m.	7.06	6.65	6.41	-0.21	-1.33	0.00
Total	414.24	438.87	458.57	62.72	69.00	71.21	14.8%	15.4%	15.1%				559.07	580.18	570.51
- Net debt**													-34.30	-12.57	1.33
- Pension liabilities**													-143.31	-147.57	-150.89
- Minorities***													-5.14	-4.42	-3.87
+ Financial investments***													0.00	0.00	0.00
Fair equity value													376.30	567.61	571.85
Fair value/share (€)													37.13	41.01	41.15
Average fair value/share (€)															39.76

* w/o extraordinary items

** At book value

*** At market value

- Specialty chemicals segment peers: Covestro, Huntsman, Ube Industries, PetroChina Company and Kumho Petrochemical
- Basics & Intermediates segment peers: BASF, DuPont de Nemours, Clariant, Evonik, Lanxess,
- International Flavours and Fragrances (IFF)
- Other & Holding segment peer: Evonik

Valuation	2017	2018	2019	2020	2021e	2022e	2023e
Price / Book	20.7 x	4.3 x	3.6 x	3.0 x	2.8 x	2.3 x	1.9 x
Book value per share ex intangibles	5.37	6.50	5.72	6.40	8.10	10.12	12.14
EV / Sales	3.6 x	1.2 x	1.1 x	1.0 x	1.0 x	0.9 x	0.8 x
EV / EBITDA	29.3 x	9.0 x	8.1 x	7.2 x	6.6 x	5.8 x	5.4 x
EV / EBIT	42.9 x	13.0 x	13.2 x	12.6 x	10.8 x	9.0 x	8.5 x
EV / EBIT adj.*	42.9 x	13.0 x	13.2 x	12.6 x	10.8 x	9.0 x	8.5 x
P / FCF	199.0 x	n.a.	93.8 x	10.1 x	13.8 x	7.8 x	9.9 x
P / E	60.7 x	12.8 x	12.0 x	10.2 x	9.7 x	8.2 x	7.8 x
P / E adj.*	60.7 x	12.8 x	12.0 x	10.2 x	9.7 x	8.2 x	7.8 x
Dividend Yield	n.a.	3.2 %	3.5 %	3.9 %	3.6 %	4.3 %	4.7 %
FCF Potential Yield (on market EV)	1.8 %	5.9 %	6.4 %	7.9 %	8.7 %	10.1 %	10.8 %

*Adjustments made for: Restructuring costs, value adjustments, one-off earnings/losses

Consolidated profit & loss

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Sales	353.9	375.2	376.1	379.3	414.2	438.9	458.6
Change Sales yoy	8.2 %	6.0 %	0.2 %	0.8 %	9.2 %	5.9 %	4.5 %
Increase / decrease in inventory	1.8	5.5	-4.9	-2.5	-1.5	0.0	0.0
Own work capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sales	355.7	380.7	371.2	376.7	412.7	438.9	458.6
Material expenses	137.9	155.4	142.4	132.5	147.4	154.4	162.2
Gross profit	217.8	225.2	228.8	244.2	265.3	284.5	296.3
<i>Gross profit margin</i>	<i>61.5 %</i>	<i>60.0 %</i>	<i>60.8 %</i>	<i>64.4 %</i>	<i>64.1 %</i>	<i>64.8 %</i>	<i>64.6 %</i>
Personnel expenses	109.2	114.2	122.1	127.4	136.6	145.2	151.7
Other operating income	11.6	13.4	17.1	10.7	11.7	12.4	13.0
Other operating expenses	76.1	75.1	73.8	73.7	77.7	82.7	86.4
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	44.0	49.4	50.1	53.8	62.7	69.0	71.2
<i>Margin</i>	<i>12.4 %</i>	<i>13.2 %</i>	<i>13.3 %</i>	<i>14.2 %</i>	<i>15.1 %</i>	<i>15.7 %</i>	<i>15.5 %</i>
Depreciation of fixed assets	14.0	15.2	19.5	23.1	24.2	24.8	25.6
EBITA	30.0	34.2	30.6	30.7	38.6	44.2	45.6
Amortisation of intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Goodwill amortisation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	30.0	34.2	30.6	30.7	38.6	44.2	45.6
<i>Margin</i>	<i>8.5 %</i>	<i>9.1 %</i>	<i>8.1 %</i>	<i>8.1 %</i>	<i>9.3 %</i>	<i>10.1 %</i>	<i>10.0 %</i>
EBIT adj.	30.0	34.2	30.6	30.7	38.6	44.2	45.6
Interest income	0.4	0.2	0.1	0.0	0.0	0.0	0.0
Interest expenses	2.5	2.4	2.7	2.1	2.1	1.8	1.3
Other financial income (loss)	0.0	0.0	-2.5	-1.4	-1.5	-1.4	-1.3
EBT	27.9	32.0	25.5	27.2	35.0	41.0	43.1
<i>Margin</i>	<i>7.9 %</i>	<i>8.5 %</i>	<i>6.8 %</i>	<i>7.2 %</i>	<i>8.4 %</i>	<i>9.3 %</i>	<i>9.4 %</i>
Total taxes	8.8	9.1	7.3	7.3	10.1	11.9	12.5
Net income from continuing operations	19.2	22.8	18.1	19.9	24.8	29.1	30.6
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	19.2	22.8	18.1	19.9	24.8	29.1	30.6
Minority interest	0.2	0.1	0.2	0.2	0.2	0.2	0.2
Net income	19.0	22.7	18.0	19.7	24.7	29.0	30.4
<i>Margin</i>	<i>5.4 %</i>	<i>6.0 %</i>	<i>4.8 %</i>	<i>5.2 %</i>	<i>6.0 %</i>	<i>6.6 %</i>	<i>6.6 %</i>
Number of shares, average	10.2	10.2	10.2	10.2	10.1	10.1	10.1
EPS	1.87	2.23	1.77	1.94	2.43	2.86	3.00
EPS adj.	1.87	2.23	1.77	1.94	2.43	2.86	3.00

*Adjustments made for: Restructuring costs, value adjustments, one-off earnings/losses

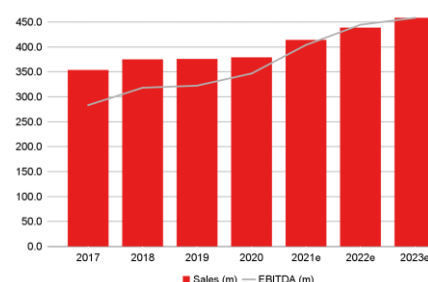
Guidance: FY 2021: EBITDA strongly rising to up to EUR 64m

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Total Operating Costs / Sales	60.5 %	61.4 %	57.5 %	54.4 %	54.3 %	54.0 %	54.2 %
Operating Leverage	-0.6 x	2.3 x	-46.3 x	0.5 x	2.8 x	2.5 x	0.7 x
EBITDA / Interest expenses	17.7 x	20.2 x	18.3 x	25.1 x	30.2 x	39.2 x	54.1 x
Tax rate (EBT)	31.4 %	28.6 %	28.8 %	27.0 %	29.0 %	29.0 %	29.0 %
Dividend Payout Ratio	0.0 %	40.1 %	42.1 %	39.4 %	34.7 %	34.8 %	36.5 %
Sales per Employee	n.a.	761,221,489	n.a.	n.a.	n.a.	n.a.	n.a.

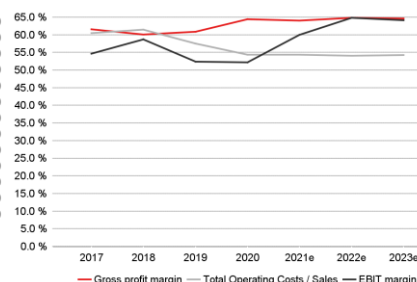
Sales, EBITDA

in EUR m

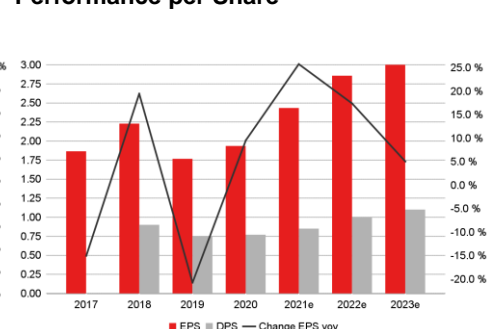


Operating Performance

in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

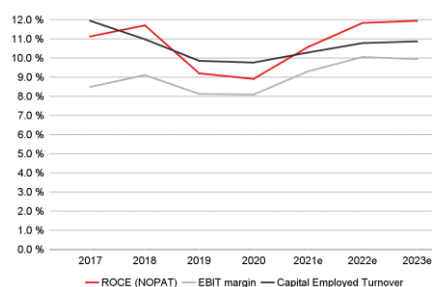
Consolidated balance sheet

In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Assets							
Goodwill and other intangible assets	1.0	0.9	1.5	1.8	1.6	1.5	1.3
thereof other intangible assets	1.0	0.9	1.5	1.8	1.6	1.5	1.3
thereof Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property, plant and equipment	115.1	144.3	175.5	183.6	189.6	194.9	201.0
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	116.1	145.1	177.0	185.4	191.2	196.4	202.3
Inventories	71.4	78.9	74.6	67.4	71.5	72.4	74.5
Accounts receivable	35.0	34.4	32.5	33.1	47.2	45.0	47.0
Liquid assets	12.8	12.9	9.1	17.1	17.2	26.0	24.0
Other short-term assets	44.8	42.4	49.4	51.3	49.1	51.1	52.6
Current assets	164.0	168.4	165.6	168.9	185.0	194.4	198.1
Total Assets	280.2	313.6	342.6	354.3	376.2	390.8	400.5
Liabilities and shareholders' equity							
Subscribed capital	101.8	101.8	101.8	101.8	101.8	101.8	101.8
Capital reserve	-5.5	-4.2	-5.0	-4.2	-2.2	0.3	2.7
Retained earnings	-33.6	-25.4	-30.7	-25.5	-13.2	1.7	16.5
Other equity components	-6.9	-5.2	-6.3	-5.2	-2.7	0.3	3.4
Shareholders' equity	55.7	67.0	59.8	66.9	83.7	104.1	124.3
Minority interest	2.2	1.4	1.6	1.8	1.8	1.9	2.0
Total equity	57.9	68.4	61.4	68.7	85.6	106.0	126.4
Provisions	125.9	131.4	158.8	168.9	174.1	179.6	183.8
thereof provisions for pensions and similar obligations	107.2	110.0	134.6	141.8	143.3	147.6	150.9
Financial liabilities (total)	41.3	57.9	62.7	60.7	51.5	38.5	22.7
Short-term financial liabilities	22.1	25.4	11.9	12.7	10.5	3.9	2.0
Accounts payable	28.2	30.9	24.1	20.9	25.8	27.3	28.6
Other liabilities	26.9	25.0	35.7	35.1	39.3	39.3	39.0
Liabilities	222.3	245.2	281.2	285.6	290.7	284.8	274.1
Total liabilities and shareholders' equity	280.2	313.6	342.6	354.3	376.2	390.8	400.5

Financial Ratios

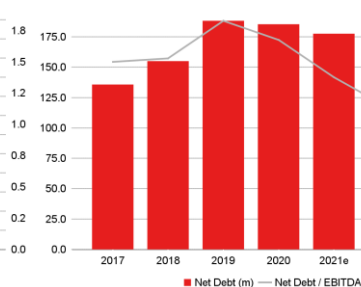
	2017	2018	2019	2020	2021e	2022e	2023e
Efficiency of Capital Employment							
Operating Assets Turnover	1.8 x	1.7 x	1.5 x	1.4 x	1.5 x	1.5 x	1.6 x
Capital Employed Turnover	1.8 x	1.7 x	1.5 x	1.5 x	1.6 x	1.6 x	1.7 x
ROA	16.3 %	15.6 %	10.2 %	10.6 %	12.9 %	14.7 %	15.0 %
Return on Capital							
ROCE (NOPAT)	11.1 %	11.7 %	9.2 %	8.9 %	10.6 %	11.9 %	12.0 %
ROE	34.8 %	37.0 %	28.4 %	31.1 %	32.8 %	30.8 %	26.6 %
Adj. ROE	34.8 %	37.0 %	28.4 %	31.1 %	32.8 %	30.8 %	26.6 %
Balance sheet quality							
Net Debt	135.8	155.0	188.3	185.4	177.6	160.1	149.6
Net Financial Debt	28.5	45.1	53.6	43.6	34.3	12.6	-1.3
Net Gearing	234.5 %	226.7 %	306.8 %	270.0 %	207.6 %	151.1 %	118.3 %
Net Fin. Debt / EBITDA	64.8 %	91.3 %	107.1 %	81.1 %	54.7 %	18.2 %	n.a.
Book Value / Share	5.5	6.6	5.9	6.6	8.3	10.3	12.3
Book value per share ex intangibles	5.4	6.5	5.7	6.4	8.1	10.1	12.1

ROCE Development



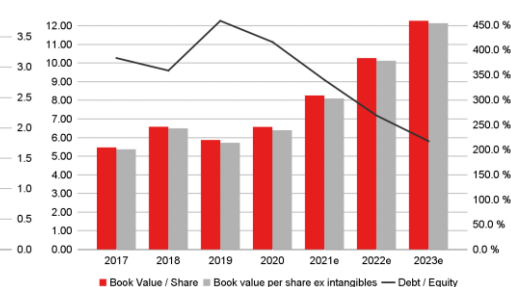
Source: Warburg Research

Net debt in EUR m



Source: Warburg Research

Book Value per Share in EUR



Source: Warburg Research

Consolidated cash flow statement

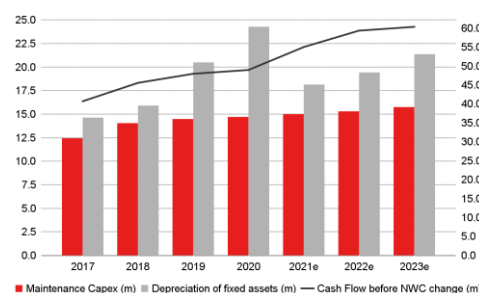
In EUR m	2017	2018	2019	2020	2021e	2022e	2023e
Net income	19.2	22.8	18.1	19.9	24.8	29.1	30.6
Depreciation of fixed assets	14.6	15.9	20.5	24.3	18.1	19.4	21.4
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	-0.6	-0.7	-1.0	-1.2	6.0	5.4	4.2
Increase/decrease in long-term provisions	-0.6	-0.7	-1.0	-1.2	6.0	5.4	4.2
Other non-cash income and expenses	8.2	8.3	11.4	7.2	0.0	0.0	0.0
Cash Flow before NWC change	40.7	45.6	48.0	49.0	55.0	59.4	60.4
Increase / decrease in inventory	-8.2	-5.3	2.4	5.3	-4.1	-0.8	-2.2
Increase / decrease in accounts receivable	-1.0	-5.9	-7.1	-5.8	-11.9	0.2	-3.5
Increase / decrease in accounts payable	0.0	0.0	0.0	0.0	-0.8	0.1	0.1
Increase / decrease in other working capital positions	-0.9	0.3	0.3	0.2	9.1	1.6	0.9
Increase / decrease in working capital (total)	-10.1	-10.9	-4.4	-0.3	-7.8	1.1	-4.7
Net cash provided by operating activities [1]	30.6	34.7	43.6	48.7	47.2	60.4	55.6
Investments in intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	-24.9	-40.1	-41.4	-28.8	-30.0	-30.0	-31.5
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.1	0.2	0.1	0.0	0.0	0.0	0.0
Net cash provided by investing activities [2]	-24.8	-39.9	-41.3	-28.8	-30.0	-30.0	-31.5
Change in financial liabilities	10.9	16.5	4.8	-1.9	-9.3	-13.0	-15.8
Dividends paid	-17.8	-11.3	-9.3	-7.8	-7.9	-8.7	-10.2
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	1.9	0.0	-1.6	-2.0	0.0	0.0	0.0
Net cash provided by financing activities [3]	-5.1	5.3	-6.2	-11.7	-17.2	-21.7	-26.1
Change in liquid funds [1]+[2]+[3]	0.8	0.0	-3.9	8.2	0.1	8.8	-1.9
Effects of exchange-rate changes on cash	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0
Cash and cash equivalent at end of period	12.8	12.9	9.1	17.1	17.2	26.0	24.0

Financial Ratios

	2017	2018	2019	2020	2021e	2022e	2023e
Cash Flow							
FCF	5.8	-5.2	2.3	19.9	17.2	30.4	24.1
Free Cash Flow / Sales	1.6 %	-1.4 %	0.6 %	5.2 %	4.2 %	6.9 %	5.3 %
Free Cash Flow Potential	22.8	26.2	25.8	30.4	36.1	40.4	41.7
Free Cash Flow / Net Profit	30.5 %	-23.1 %	12.8 %	100.9 %	69.9 %	105.1 %	79.3 %
Interest Received / Avg. Cash	3.0 %	1.6 %	1.1 %	0.1 %	0.1 %	0.1 %	0.1 %
Interest Paid / Avg. Debt	7.0 %	4.9 %	4.5 %	3.5 %	3.7 %	3.9 %	4.3 %
Management of Funds							
Investment ratio	7.0 %	10.7 %	11.0 %	7.6 %	7.2 %	6.8 %	6.9 %
Maint. Capex / Sales	3.5 %	3.7 %	3.9 %	3.9 %	3.6 %	3.5 %	3.4 %
Capex / Dep	177.8 %	264.2 %	212.3 %	124.8 %	124.1 %	120.9 %	123.2 %
Avg. Working Capital / Sales	22.0 %	21.4 %	22.0 %	21.4 %	20.8 %	20.8 %	20.0 %
Trade Debtors / Trade Creditors	124.2 %	111.3 %	135.0 %	158.6 %	182.8 %	164.5 %	164.5 %
Inventory Turnover	1.9 x	2.0 x	1.9 x	2.0 x	2.1 x	2.1 x	2.2 x
Receivables collection period (days)	36	33	32	32	42	37	37
Payables payment period (days)	75	72	62	58	64	65	64
Cash conversion cycle (Days)	150	146	161	160	155	144	141

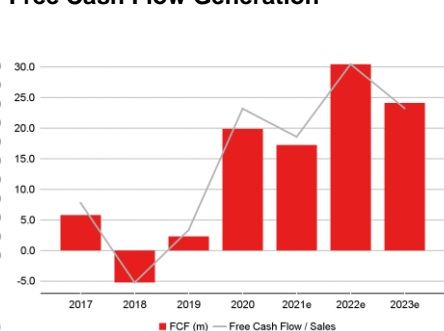
CAPEX and Cash Flow

in EUR m



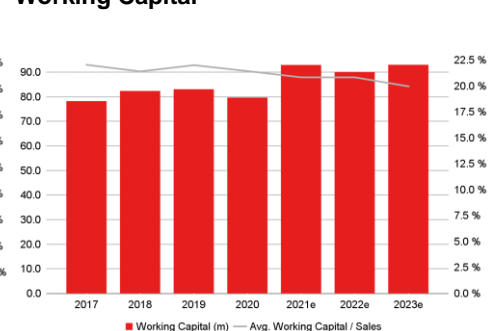
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
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-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
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“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	154	71
Hold	56	26
Sell	5	2
Rating suspended	3	1
Total	218	100

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	49	83
Hold	8	14
Sell	0	0
Rating suspended	2	3
Total	59	100

PRICE AND RATING HISTORY ALZCHEM AS OF 19.11.2021



Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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