(CDAX, Chemicals, ACT GR)



D		Value Indicators:	EUR	Warburg ESG Risk Score:	2.4	Description:	
Buy		DCF:	25.48	ESG Score (MSCI based):	3.0	Alzaham is an integrated and	ai altr
		FCF-Value Potential 22-24:	21.11	Balance Sheet Score:	3.3	Alzchem is an integrated spec chemicals provider	cially
EUR 25.50		SotP 22-23:	29.74	Market Liquidity Score:	1.0		
		Market Snapshot:	EUR m	Shareholders:		Key Figures (WRe):	2022e
		Market cap:	191.1	Freefloat	46.68 %	Beta:	1.6
Price	EUR 18.85	No. of shares (m):	10.1	LIVIA Corporate Development	25.13 %	Price / Book:	1.4 x
Upside	35.3 %	EV:	363.2	for two na GmbH	15.05 %	Equity Ratio:	31 %
openae		Freefloat MC:	89.2	HDI Vier CE GmbH	12.74 %	Net Fin. Debt / EBITDA:	1.4 x
		Ø Trad. Vol. (30d):	296.48 th	Own shares	0.40 %	Net Debt / EBITDA:	2.9 x

FCF generation improving but earnings bound to face stronger headwinds

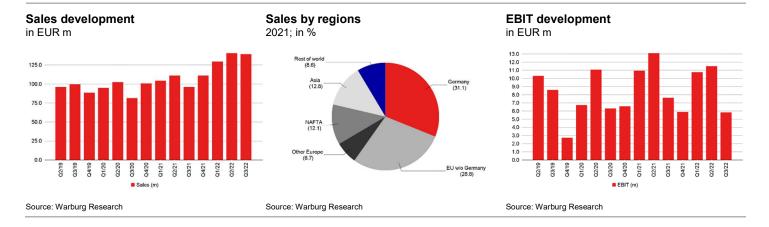
Stat	ed Figures Q3/20)22:									Comment on Figures:
thereo	Sales Group	6.67	45.1% 54.9%	118.61 61.25 50.96 6.40	95.92 47.12 42.47 6.34	Consensus 117.2	409.02 214.46 174.93 19.64	31.4% 31.4% 35.9% 1.7%	202.74 166.33 19.37	311.24 163.22 128.71 19.31	 Q3 2022 results were broadly in line with consensus, but ahead of WR estimates. As expected, the company faced major headwinds from higher electricity prices in Q3 2022. However, the higher costs were mitigated by flexible management of
thereo	EBITDA margin	8.7% 14.64 -2.62 1.04 -0.91	45.0% n.m. 102.7% n.m. -23.7% 26.5%	9.9% 11.03 0.51 0.45 -0.20 5.48 3.50	14.4% 10.10 3.12 0.51 0.11 7.63 4.69		47.025 11.5% 45.23 1.07 1.73 -1.00 28.09 23.22 2.29	-5.1% 16.4% -89.0% 91.3% n.m. -11.3% 6.8% 7.0%	12.0% 41.61 4.21 1.71 -0.87 27.76 20.79	15.9% 38.84 9.74 0.90 0.07 31.68 21.75	 production as well as by increasing selling prices. Prices in the Basics & Intermediates segment were raised by 50.6% yoy but volumes declined by -11.2%. Prices in the Specialty Chemicals segment rose by 30.1% and volumes by 13.5% as demand from the automotive and the agriculture sector remained strong in Q3 2022.

The sales inflation in the Specialty Chemicals segment and Basic & Intermediates segment accelerated in Q3 2022, as Alzchem passed on higher variable costs (mainly related to electricity price increases) to customers. As a consequence, the gross earnings-to-sales ratio declined from 65.7% in Q3 2021 to 45.1% in Q3 2022. The EBITDA-decline mainly resulted from adverse volume effects in Basic & Intermediates, as the company curbed production in times of peak electricity prices to prevent an even stronger decline in profitability. In contrast, Specialty Chemicals benefitted from higher volumes as demand remained robust, thus greatly improving its EBITDA yoy. We expect the positive volume trend to continue especially in the Creapure® part of the business, as the newly built capacity expansion is slated to add sales of up to EUR 40m from FY 2023 onwards. FCF in Q3 2022 was less negative than in Q3 2021 (EUR -4.1m vs. EUR -6.0m). However, on a 9M-basis, FCF was -36.3m vs. EUR +3.3m 2021, highlighting a significant increase in working capital requirements. Given that electricity prices have come off the Q3 peaks, we expect Alzchem to release some WC from Q4 2023 onwards. Nevertheless, given macroeconomic headwinds and higher variable costs, we continue to anticipate lower earnings in FY 2023. However, this should already be well reflected in the current share price. We reiterate our Buy rating and our PT of EUR 25.50 (based on a DCF calculation).

Changes in E	stimates:						Comment on Changes:
FY End: 31.12. in EUR m	2022e (old)	+ / -	2023e (old)	+ / -	2024e (old)	+ / -	 Changes in estimates mainly reflect better Q3 2022 results than anticipated.
Sales	522.2	3.9 %	534.3	3.9 %	558.5	3.9 %	 We have revised our dividend expectations for the periods 2023e and 2024e to reflect a pay-out ratio of ca. 40% of EPS, which we regard as
EBIT EPS	32.7 2.31	2.4 % 11.1 %	26.2 1.40	8.6 % 16.6 %	34.1 2.36	7.5 % -6.5 %	sustainable
DPS Net Debt	1.00 179.0	0.0 % -3.8 %	1.10 183.2	-40.9 % -5.0 %	1.10 180.7	-22.7 % -6.7 %	

25 - An My		FY End: 31.12. in EUR m	CAGR (21-24e)	2018	2019	2020	2021	2022e	2023e	2024e
24 - MM		Sales	11.2 %	375.2	376.1	379.3	422.3	542.8	555.3	580.5
22 - 11 14 14		Change Sales yoy		6.0 %	0.2 %	0.8 %	11.3 %	28.5 %	2.3 %	4.5 %
21 -		Gross profit margin		60.0 %	60.8 %	64.4 %	62.0 %	51.3 %	50.4 %	51.0 %
20 -	m	EBITDA	0.6 %	49.4	50.1	53.8	62.0	58.7	54.4	63.2
19 - M. M. M. M.	M	Margin		13.2 %	13.3 %	14.2 %	14.7 %	10.8 %	9.8 %	10.9 %
18	N	EBIT	-0.8 %	34.2	30.6	30.7	37.6	33.5	28.5	36.6
17 -	A M	Margin		9.1 %	8.1 %	8.1 %	8.9 %	6.2 %	5.1 %	6.3 %
16 - 15 -		Net income	-6.8 %	22.7	18.0	19.7	27.6	26.0	16.5	22.4
01/22 03/22 05/22 07/22 09/22	11/22	EPS	-6.8 %	2.23	1.77	1.94	2.72	2.57	1.63	2.21
- Alzchem - CDAX (normalised)		EPS adj.	-6.8 %	2.23	1.77	1.94	2.72	2.57	1.63	2.21
Alzchem — CDAX (normalised)		DPS	-5.3 %	0.90	0.75	0.77	1.00	1.00	0.65	0.85
Rel. Performance vs CDAX:		Dividend Yield		3.2 %	3.5 %	3.9 %	4.1 %	5.3 %	3.4 %	4.5 %
	0.0.0/	FCFPS		-0.51	0.23	1.95	1.43	-3.77	0.93	1.40
1 month:	8.9 %	FCF / Market cap		-1.8 %	1.1 %	9.9 %	5.9 %	-20.0 %	4.9 %	7.4 %
6 months:	-7.8 %	EV / Sales		1.2 x	1.1 x	1.0 x	1.0 x	0.7 x	0.7 x	0.6 x
Year to date:	-3.2 %	EV / EBITDA		9.0 x	8.1 x	7.2 x	6.9 x	6.2 x	6.7 x	5.7 x
Trailing 12 months:	-7.6 %	EV / EBIT		13.0 x	13.2 x	12.6 x	11.3 x	10.8 x	12.8 x	9.8 x
5		P/E		12.8 x	12.0 x	10.2 x	8.9 x	7.3 x	11.6 x	8.5 x
Company events:		P / E adj.		12.8 x	12.0 x	10.2 x	8.9 x	7.3 x	11.6 x	8.5 x
		FCF Potential Yield		5.9 %	6.4 %	7.9 %	9.1 %	8.9 %	8.6 %	10.4 %
		Net Debt		155.0	188.3	185.4	179.8	172.2	174.0	168.6
		ROCE (NOPAT)		11.7 %	9.2 %	8.9 %	10.9 %	8.3 %	6.5 %	8.1 %
		Guidance:	FY 2021: EBI	TDA of EUR &	59 - 68m					
Analyst										



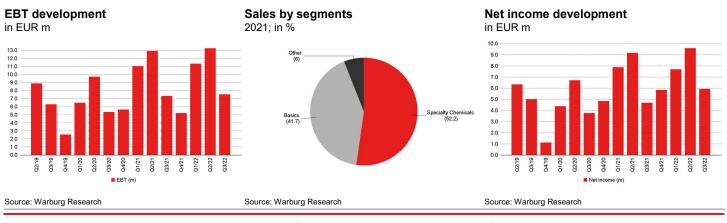


Company Background

- 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 S
 üddeutsche 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
- Takeover by bluO in 2009, conversion to Alzchem AG 2011. 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





DCF model														
	Detaile	d forecas	t period				٦	ransition	al period					Term. Value
Figures in EUR m	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	2032e	2033e	2034e	
Sales	542.8	555.3	580.5	603.8	627.3	651.1	675.2	699.6	724.0	747.9	771.1	793.5	814.9	
Sales change	28.5 %	2.3 %	4.5 %	4.0 %	3.9 %	3.8 %	3.7 %	3.6 %	3.5 %	3.3 %	3.1 %	2.9 %	2.7 %	1.0 %
EBIT	33.5	28.5	36.6	44.2	48.4	52.9	57.5	63.1	68.9	71.2	73.4	75.6	77.6	
EBIT-margin	6.2 %	5.1 %	6.3 %	7.3 %	7.7 %	8.1 %	8.5 %	9.0 %	9.5 %	9.5 %	9.5 %	9.5 %	9.5 %	
Tax rate (EBT)	28.0 %	28.0 %	28.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	
NOPAT	24.1	20.5	26.4	31.4	34.4	37.5	40.9	44.8	48.9	50.6	52.1	53.6	55.1	
Depreciation	25.2	25.9	26.6	28.2	30.0	31.8	33.6	34.8	36.0	37.2	38.4	39.5	40.6	
in % of Sales	4.6 %	4.7 %	4.6 %	4.7 %	4.8 %	4.9 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	
Changes in provisions	-49.0	1.0	2.1	3.8	3.8	3.9	3.9	3.9	4.0	3.9	3.8	3.6	3.5	
Change in Liquidity from														
- Working Capital	38.8	2.0	4.1	5.6	5.7	5.7	5.8	5.8	5.9	5.7	5.6	5.4	5.2	
- Capex	30.0	30.9	31.8	33.2	33.9	34.5	35.1	35.7	36.2	37.4	38.6	39.7	40.7	
Capex in % of Sales	5.5 %	5.6 %	5.5 %	5.5 %	5.4 %	5.3 %	5.2 %	5.1 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	
- 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)	-68.5	14.5	19.1	24.6	28.6	32.9	37.5	42.0	46.9	48.5	50.1	51.7	53.2	55
PV of FCF	-68.0	13.2	16.0	19.0	20.3	21.5	22.5	23.2	23.8	22.6	21.5	20.4	19.3	257
share of PVs		-8.95 %						49.54	4 %					59.41 %
Model parameter							Valuat	on (m)						
Derivation of WACC:			Derivation	of Beta:			Presen	t values 20)34e	17	5			
							Termin	al Value		25	57			
Debt ratio	35.20 %		Financial S	0		1.50		al liabilitie			2			
Cost of debt (after tax)	3.6 %		Liquidity (s	share)		2.00		n liabilities)1			
Market return	8.25 %		Cyclicality			1.50	Hybrid	•			0			
Risk free rate	2.75 %		Transpare	ncy		2.00		/ interest			2			
			Others			1.00		val. of inv	estments		0			
							Liquidit			1		No. of sha	()	10.1
WACC	8.75 %		Beta			1.60	Equity	Value		25	8	Value per	share (E	UR) 25.48

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
1.88	9.8 %	17.20	17.70	18.23	18.79	19.38	20.00	20.67	1.88	9.8 %	14.51	15.93	17.36	18.79	20.21	21.64	23.06
1.74	9.3 %	20.04	20.63	21.26	21.92	22.63	23.37	24.17	1.74	9.3 %	17.39	18.90	20.41	21.92	23.43	24.95	26.46
1.67	9.0 %	21.60	22.24	22.92	23.64	24.41	25.24	26.11	1.67	9.0 %	18.97	20.52	22.08	23.64	25.20	26.76	28.32
1.60	8.8 %	23.25	23.95	24.69	25.48	26.33	27.23	28.20	1.60	8.8 %	20.65	22.26	23.87	25.48	27.09	28.70	30.31
1.53	8.5 %	25.00	25.76	26.58	27.45	28.38	29.37	30.44	1.53	8.5 %	22.46	24.12	25.78	27.45	29.11	30.77	32.44
1.46	8.3 %	26.87	27.71	28.60	29.55	30.58	31.68	32.86	1.46	8.3 %	24.39	26.11	27.83	29.55	31.28	33.00	34.72
1.32	7.8 %	31.00	32.01	33.09	34.25	35.50	36.86	38.32	1.32	7.8 %	28.70	30.55	32.40	34.25	36.10	37.95	39.80

• 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).

WARBURG RESEARCH

in EUR m		2018	2019	2020	2021	2022e	2023e	2024e
Net Income before minorities		22.8	18.1	19.9	27.8	26.2	16.7	22.5
+ Depreciation + Amortisation		15.2	19.5	23.1	24.5	25.2	25.9	26.6
 Net Interest Income 		-2.2	-2.6	-2.1	-1.5	3.8	-4.3	-4.3
 Maintenance Capex 		14.0	14.5	14.7	14.8	15.3	15.5	15.9
+ Other		0.0	0.0	0.0	0.0	0.0	0.0	0.0
= Free Cash Flow Potential		26.2	25.8	30.4	38.9	32.3	31.4	37.5
FCF Potential Yield (on market EV)	5.9 %	6.4 %	7.9 %	9.1 %	8.9 %	8.6 %	10.4 %
WACC		8.75 %	8.75 %	8.75 %	8.75 %	8.75 %	8.75 %	8.75 %
= Enterprise Value (EV)		444.4	404.4	387.2	425.3	363.2	365.1	359.7
= Fair Enterprise Value		299.4	294.5	347.3	444.3	369.0	359.1	428.6
- Net Debt (Cash)		39.8	39.8	39.8	39.8	81.2	82.0	74.5
- Pension Liabilities		140.0	140.0	140.0	140.0	91.0	92.0	94.1
- 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		119.6	114.7	167.5	264.6	196.8	185.1	260.0
Number of shares, average		10.2	10.2	10.2	10.1	10.1	10.1	10.1
= Fair value per share (EUR)		11.75	11.27	16.46	26.10	19.42	18.26	25.65
premium (-) / discount (+) in %						3.0 %	-3.1 %	36.1 %
Sensitivity Fair value per Share (EUR)							
	11.75 %	4.26	3.90	7.78	14.91	10.13	9.22	14.86
	10.75 %	6.30	5.91	10.15	17.95	12.65	11.67	17.79
	9.75 %	8.77	8.34	13.01	21.61	15.69	14.63	21.32
WACC	8.75 %	11.75	11.27	16.46	26.10	19.42	18.26	25.65
	7.75 %	15.61	15.07	20.95	31.76	24.12	22.83	31.11
	6.75 %	20.55	19.93	26.68	39.09	30.20	28.75	38.18
	5.75 %	27.20	26.47	34.40	48.97	38.41	36.74	47.71

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



Sum of the parts

	Sale	es	EBIT	DA*	EBITDA-I	Margin	EBITD	A (x)	Fair value	e (calc.)
€m	2022e	2023e	2022e	2023e	2022e	2023e	2022e	2023e	2022e	2023e
Specialty Chemicals Basics & Intermediates Other & Holding Consolidation	284.91 232.00 25.91 0.00	304.07 225.04 26.17 0.00	56.50 1.57 2.74 -2.08	50.24 3.10 1.83 -0.82	0.20 0.01 0.11 n.m.	0.17 0.01 0.07 n.m.	9.14 5.52 5.82 6.83	8.39 4.77 5.41 6.19	516.54 8.68 15.95 -14.18	421.77 14.81 9.92 -5.08
Total	542.82	555.29	58.74	54.35	10.7%	9.6%			526.99	441.41
- Net debt** - Pension liabilities** - Minorities*** + Financial investments*** Fair equity value									-81.17 -90.99 -2.86 0.00 445.82	-81.99 -92.03 -4.00 0.00 359.43
Fair value/share (€)									34.73	25.99
Average fair value/share (€)										30.36

* 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							
	2018	2019	2020	2021	2022e	2023e	2024e
Price / Book	4.3 x	3.6 x	3.0 x	2.8 x	1.4 x	1.3 x	1.2 x
Book value per share ex intangibles	6.50	5.72	6.40	8.42	13.46	14.11	15.68
EV / Sales	1.2 x	1.1 x	1.0 x	1.0 x	0.7 x	0.7 x	0.6 x
EV / EBITDA	9.0 x	8.1 x	7.2 x	6.9 x	6.2 x	6.7 x	5.7 x
EV / EBIT	13.0 x	13.2 x	12.6 x	11.3 x	10.8 x	12.8 x	9.8 x
EV / EBIT adj.*	13.0 x	13.2 x	12.6 x	11.3 x	10.8 x	12.8 x	9.8 x
P / FCF	n.a.	93.8 x	10.1 x	16.9 x	n.a.	20.3 x	13.5 x
P/E	12.8 x	12.0 x	10.2 x	8.9 x	7.3 x	11.6 x	8.5 x
P / E adj.*	12.8 x	12.0 x	10.2 x	8.9 x	7.3 x	11.6 x	8.5 x
Dividend Yield	3.2 %	3.5 %	3.9 %	4.1 %	5.3 %	3.4 %	4.5 %
FCF Potential Yield (on market EV)	5.9 %	6.4 %	7.9 %	9.1 %	8.9 %	8.6 %	10.4 %
*Adjustments made for: Restructuring costs, value adjust	tments, one-off earnings/lo	sses					

Consolidated profit & loss



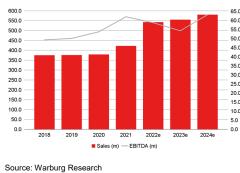
n EUR m	2018	2019	2020	2021	2022e	2023e	20246
Sales	375.2	376.1	379.3	422.3	542.8	555.3	580.
Change Sales yoy	6.0 %	0.2 %	0.8 %	11.3 %	28.5 %	2.3 %	4.5 %
Increase / decrease in inventory	5.5	-4.9	-2.5	10.0	0.0	0.0	0.0
Own work capitalised	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Sales	380.7	371.2	376.7	432.3	542.8	555.3	580.5
Material expenses	155.4	142.4	132.5	170.7	264.5	275.3	284.4
Gross profit	225.2	228.8	244.2	261.7	278.4	280.0	296.1
Gross profit margin	60.0 %	60.8 %	64.4 %	62.0 %	51.3 %	50.4 %	51.0 %
Personnel expenses	114.2	122.1	127.4	132.2	135.9	143.1	148.6
Other operating income	13.4	17.1	10.7	11.4	20.3	20.7	21.7
Other operating expenses	75.1	73.8	73.7	78.8	103.9	103.3	106.0
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	49.4	50.1	53.8	62.0	58.7	54.4	63.2
Margin	13.2 %	13.3 %	14.2 %	14.7 %	10.8 %	9.8 %	10.9 %
Depreciation of fixed assets	15.2	19.5	23.1	24.5	25.2	25.9	26.6
EBITA	34.2	30.6	30.7	37.6	33.5	28.5	36.6
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	34.2	30.6	30.7	37.6	33.5	28.5	36.6
Margin	9.1 %	8.1 %	8.1 %	8.9 %	6.2 %	5.1 %	6.3 %
EBIT adj.	34.2	30.6	30.7	37.6	33.5	28.5	36.6
Interest income	0.2	0.1	0.0	0.0	7.0	0.8	0.9
Interest expenses	2.4	2.7	2.1	1.5	3.2	5.1	5.2
Other financial income (loss)	0.0	-2.5	-1.4	0.4	-1.0	-1.0	-1.0
EBT	32.0	25.5	27.2	36.5	36.4	23.2	31.3
Margin	8.5 %	6.8 %	7.2 %	8.6 %	6.7 %	4.2 %	5.4 %
Total taxes	9.1	7.3	7.3	8.7	10.2	6.5	8.8
Net income from continuing operations	22.8	18.1	19.9	27.8	26.2	16.7	22.5
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	22.8	18.1	19.9	27.8	26.2	16.7	22.5
Minority interest	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Net income	22.7	18.0	19.7	27.6	26.0	16.5	22.4
Margin	6.0 %	4.8 %	5.2 %	6.5 %	4.8 %	3.0 %	3.9 %
Number of shares, average	10.2	10.2	10.2	10.1	10.1	10.1	10.1
EPS	2.23	1.77	1.94	2.72	2.57	1.63	2.21
EPS adj.	2.23	1.77	1.94	2.72	2.57	1.63	2.21

Guidance: FY 2021: EBITDA of EUR 59 - 68m

Financial Ratios

2018	2019	2020	2021	2022e	2023e	2024e
61.4 %	57.5 %	54.4 %	59.1 %	67.9 %	68.2 %	67.3 %
2.3 x	-46.3 x	0.5 x	2.0 x	-0.4 x	-6.5 x	6.3 x
20.2 x	18.3 x	25.1 x	41.6 x	18.5 x	10.7 x	12.2 x
28.6 %	28.8 %	27.0 %	24.0 %	28.0 %	28.0 %	28.0 %
40.1 %	42.1 %	39.4 %	36.5 %	38.7 %	39.5 %	38.2 %
761,221,489	223,112	n.a.	n.a.	n.a.	n.a.	n.a.
	61.4 % 2.3 x 20.2 x 28.6 % 40.1 %	61.4 % 57.5 % 2.3 x -46.3 x 20.2 x 18.3 x 28.6 % 28.8 % 40.1 % 42.1 %	61.4 % 57.5 % 54.4 % 2.3 x -46.3 x 0.5 x 20.2 x 18.3 x 25.1 x 28.6 % 28.8 % 27.0 % 40.1 % 42.1 % 39.4 %	61.4 % 57.5 % 54.4 % 59.1 % 2.3 x -46.3 x 0.5 x 2.0 x 20.2 x 18.3 x 25.1 x 41.6 x 28.6 % 28.8 % 27.0 % 24.0 % 40.1 % 42.1 % 39.4 % 36.5 %	61.4 % 57.5 % 54.4 % 59.1 % 67.9 % 2.3 x -46.3 x 0.5 x 2.0 x -0.4 x 20.2 x 18.3 x 25.1 x 41.6 x 18.5 x 28.6 % 28.8 % 27.0 % 24.0 % 28.0 % 40.1 % 42.1 % 39.4 % 36.5 % 38.7 %	61.4 % 57.5 % 54.4 % 59.1 % 67.9 % 68.2 % 2.3 x -46.3 x 0.5 x 2.0 x -0.4 x -6.5 x 20.2 x 18.3 x 25.1 x 41.6 x 18.5 x 10.7 x 28.6 % 28.8 % 27.0 % 24.0 % 28.0 % 28.0 % 40.1 % 42.1 % 39.4 % 36.5 % 38.7 % 39.5 %

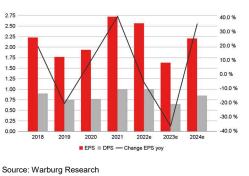




Operating Performance in %



Performance per Share



Source: Warburg Research

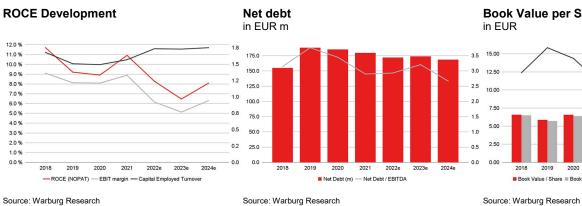
Consolidated balance sheet



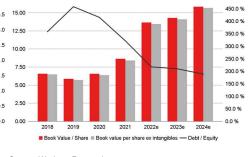
Consolidated balance sheet							
In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Assets							
Goodwill and other intangible assets	0.9	1.5	1.8	2.3	2.1	1.9	1.7
thereof other intangible assets	0.9	1.5	1.8	2.3	2.1	1.9	1.7
thereof Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property, plant and equipment	144.3	175.5	183.6	186.5	191.5	196.7	202.1
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	145.1	177.0	185.4	188.8	193.6	198.6	203.8
Inventories	78.9	74.6	67.4	86.7	133.2	135.2	139.3
Accounts receivable	34.4	32.5	33.1	40.8	49.5	50.6	52.9
Liquid assets	12.9	9.1	17.1	8.3	11.0	11.6	12.9
Other short-term assets	42.4	49.4	51.3	53.0	59.1	60.0	61.9
Current assets	168.4	165.6	168.9	188.8	252.8	257.5	267.0
Total Assets	313.6	342.6	354.3	377.7	446.4	456.1	470.9
Liabilities and shareholders' equity							
Subscribed capital	101.8	101.8	101.8	101.8	101.8	101.8	101.8
Capital reserve	-4.2	-5.0	-4.2	-1.7	4.4	5.2	7.1
Retained earnings	-25.4	-30.7	-25.5	-10.3	26.8	31.5	43.0
Other equity components	-5.2	-6.3	-5.2	-2.1	5.5	6.5	8.8
Shareholders' equity	67.0	59.8	66.9	87.6	138.5	144.9	160.6
Minority interest	1.4	1.6	1.8	1.9	2.0	2.1	2.2
Total equity	68.4	61.4	68.7	89.6	140.5	147.0	162.8
Provisions	131.4	158.8	168.9	167.3	118.5	120.0	122.9
thereof provisions for pensions and similar obligations	110.0	134.6	141.8	140.0	91.0	92.0	94.1
Financial liabilities (total)	57.9	62.7	60.7	48.0	92.2	93.6	87.4
Short-term financial liabilities	25.4	11.9	12.7	10.5	9.5	9.6	10.9
Accounts payable	30.9	24.1	20.9	32.8	49.1	50.3	52.6
Other liabilities	25.0	35.7	35.1	39.9	46.0	45.2	45.1
Liabilities	245.2	281.2	285.6	288.1	305.9	309.1	308.0
Total liabilities and shareholders' equity	313.6	342.6	354.3	377.7	446.4	456.1	470.9

Financial Ratios

	2018	2019	2020	2021	2022e	2023e	2024e
Efficiency of Capital Employment							
Operating Assets Turnover	1.7 x	1.5 x	1.4 x	1.5 x	1.7 x	1.7 x	1.7 x
Capital Employed Turnover	1.7 x	1.5 x	1.5 x	1.6 x	1.7 x	1.7 x	1.8 x
ROA	15.6 %	10.2 %	10.6 %	14.6 %	13.4 %	8.3 %	11.0 %
Return on Capital							
ROCE (NOPAT)	11.7 %	9.2 %	8.9 %	10.9 %	8.3 %	6.5 %	8.1 %
ROE	37.0 %	28.4 %	31.1 %	35.7 %	23.0 %	11.7 %	14.6 %
Adj. ROE	37.0 %	28.4 %	31.1 %	35.7 %	23.0 %	11.7 %	14.6 %
Balance sheet quality							
Net Debt	155.0	188.3	185.4	179.8	172.2	174.0	168.6
Net Financial Debt	45.1	53.6	43.6	39.8	81.2	82.0	74.5
Net Gearing	226.7 %	306.8 %	270.0 %	200.7 %	122.5 %	118.4 %	103.6 %
Net Fin. Debt / EBITDA	91.3 %	107.1 %	81.1 %	64.1 %	138.2 %	150.8 %	117.9 %
Book Value / Share	6.6	5.9	6.6	8.6	13.7	14.3	15.8
Book value per share ex intangibles	6.5	5.7	6.4	8.4	13.5	14.1	15.7



Book Value per Share



COMMENT

Published 28.11.2022

Consolidated cash flow statement

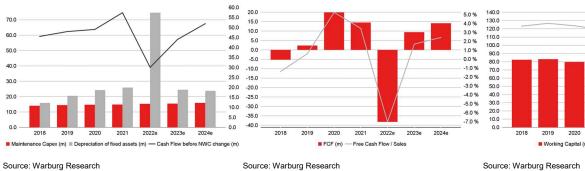


In EUR m	2018	2019	2020	2021	2022e	2023e	2024e
Net income	22.8	18.1	19.9	27.8	26.2	16.7	22.5
Depreciation of fixed assets	15.9	20.5	24.3	25.9	74.6	24.5	23.7
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	-0.7	-1.0	-1.2	-1.4	-49.4	1.4	2.8
Increase/decrease in long-term provisions	-0.7	-1.0	-1.2	-1.4	-49.4	1.4	2.8
Other non-cash income and expenses	8.3	11.4	7.2	6.6	28.0	0.0	0.0
Cash Flow before NWC change	45.6	48.0	49.0	57.4	30.0	44.0	51.9
Increase / decrease in inventory	-5.3	2.4	5.3	-16.5	-46.5	-2.0	-4.1
Increase / decrease in accounts receivable	-5.9	-7.1	-5.8	1.8	-14.8	-2.0	-4.1
Increase / decrease in accounts payable	0.0	0.0	0.0	0.0	0.6	0.1	0.1
Increase / decrease in other working capital positions	0.3	0.3	0.2	0.3	22.5	0.3	2.2
Increase / decrease in working capital (total)	-10.9	-4.4	-0.3	-14.4	-38.2	-3.7	-6.0
Net cash provided by operating activities [1]	34.7	43.6	48.7	43.0	-8.2	40.3	46.0
Investments in intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Investments in property, plant and equipment	-40.1	-41.4	-28.8	-28.5	-30.0	-30.9	-31.8
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	0.2	0.1	0.0	0.1	0.0	0.0	0.0
Net cash provided by investing activities [2]	-39.9	-41.3	-28.8	-28.5	-30.0	-30.9	-31.8
Change in financial liabilities	16.5	4.8	-1.9	-12.7	44.1	1.4	-6.2
Dividends paid	-11.3	-9.3	-7.8	-8.0	-10.2	-10.2	-6.7
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	-1.0	0.0	0.0	0.0
Other	0.0	-1.6	-2.0	-1.9	0.0	0.0	0.0
Net cash provided by financing activities [3]	5.3	-6.2	-11.7	-23.6	33.9	-8.8	-12.8
Change in liquid funds [1]+[2]+[3]	0.0	-3.9	8.2	-9.3	-4.3	0.6	1.3
Effects of exchange-rate changes on cash	0.0	0.1	-0.1	0.3	0.0	0.0	0.0
Cash and cash equivalent at end of period	12.9	9.1	17.1	8.3	11.0	11.6	12.9

Financial Ratios

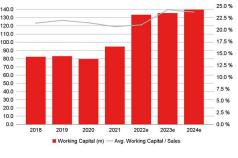
	2018	2019	2020	2021	2022e	2023e	2024e
Cash Flow							
FCF	-5.2	2.3	19.9	14.5	-38.2	9.4	14.1
Free Cash Flow / Sales	-1.4 %	0.6 %	5.2 %	3.4 %	-7.0 %	1.7 %	2.4 %
Free Cash Flow Potential	26.2	25.8	30.4	38.9	32.3	31.4	37.5
Free Cash Flow / Net Profit	-23.1 %	12.8 %	100.9 %	52.7 %	-146.9 %	56.9 %	63.3 %
Interest Received / Avg. Cash	1.6 %	1.1 %	0.1 %	0.0 %	72.6 %	7.2 %	7.0 %
Interest Paid / Avg. Debt	4.9 %	4.5 %	3.5 %	2.7 %	4.5 %	5.5 %	5.7 %
Management of Funds							
Investment ratio	10.7 %	11.0 %	7.6 %	6.8 %	5.5 %	5.6 %	5.5 %
Maint. Capex / Sales	3.7 %	3.9 %	3.9 %	3.5 %	2.8 %	2.8 %	2.7 %
Capex / Dep	264.2 %	212.3 %	124.8 %	116.6 %	118.9 %	119.3 %	119.8 %
Avg. Working Capital / Sales	21.4 %	22.0 %	21.4 %	20.6 %	21.0 %	24.2 %	23.7 %
Trade Debtors / Trade Creditors	111.3 %	135.0 %	158.6 %	124.6 %	100.7 %	100.7 %	100.7 %
Inventory Turnover	2.0 x	1.9 x	2.0 x	2.0 x	2.0 x	2.0 x	2.0 x
Receivables collection period (days)	33	32	32	35	33	33	33
Payables payment period (days)	72	62	58	70	68	67	67
Cash conversion cycle (Days)	146	161	160	151	149	146	145

CAPEX and Cash Flow in EUR m



Free Cash Flow Generation

Working Capital



COMMENT

Published 28.11.2022

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Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
Alzchem	5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE000A2YNT30.htm



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Investment recommendation: expected direction of the share price development of the financial instrument up to the given <u>price target</u> in the opinion of the analyst who covers this financial instrument.

-В-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
"_"	Rating suspended:	The available information currently does not permit an evaluation of the company.

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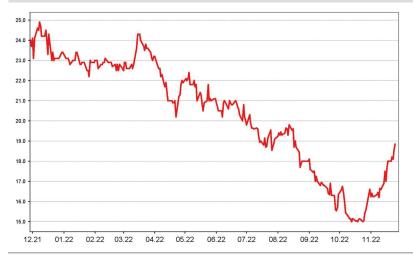
Rating	Number of stocks	% of Universe
Buy	163	76
Hold	42	20
Sell	6	3
Rating suspended	3	1
Total	214	100

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	45	83
Hold	7	13
Sell	1	2
Rating suspended	1	2
Total	54	100

PRICE AND RATING HISTORY ALZCHEM AS OF 28.11.2022



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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