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Harris Williams & Co. Ltd is a private limited company incorporated under English law having its registered office at 5th Floor, 6 St. Andrew Street, London EC4A 3AE, UK, registered with the Registrar of Companies for England and Wales under company number 7078852. Directors: Mr. Ned Valentine, Mr. Paul Poggi, Mr. Thierry Monjauze and Mr. Aadil Khan, authorised and regulated by the Financial Conduct Authority.

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CHEMICALS AND SPECIALTY MATERIALS INDUSTRY UPDATE

INTRODUCTION

Harris Williams & Co. is pleased to present its chemicals and specialty materials industry update for December 2016. This report provides commentary and analysis on current market trends and merger and acquisition dynamics within the global chemicals and specialty materials industry.

M&A activity in the sector remained healthy throughout 2016. Large strategic combinations remained a central theme, with far-reaching, and in many cases yet to be determined, implications for the middle market. In addition to strategic buyer activity, we continue to observe increased interest in the sector from financial buyers as private equity firms are drawn to the industry's relative stability, barriers to entry, and fragmented competitive landscape.

We hope you find this edition helpful and encourage you to contact us directly if you would like to discuss our perspective on current industry trends or our relevant industry experience.

OUR PRACTICE

Harris Williams & Co. is a leading advisor to the chemicals and specialty materials industry. Our significant experience covers a broad range of business models, market segments, and applications.

Business Types

- Manufacturers
- Distributors
- Outsourced Solutions
- Other Service Providers

End Markets

- Aerospace
- Agricultural
- Automotive
- Consumer
- Industrial
- Life Sciences
- Oil & Gas
- Other

Applications

- Adhesives, Sealants, & Elastomers
- Aerosols
- Cleaning & Preparation
- Films
- Paints & Coatings
- Water Treatment
- Other

HARRIS WILLIAMS & CO. DEAL SPOTLIGHT



RelaDyne

Harris Williams & Co. advised RelaDyne, a portfolio company of AEA, on its sale to Audax Group. RelaDyne is a leading integrated provider of lubricant, fuel, and reliability service solutions.

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CONTACTS

Patrick McNulty
Managing Director
pmcnulty@harriswilliams.com
+1 (804) 932-1339

John Lautemann
Vice President
jlautemann@harriswilliams.com
+1 (804) 887-6081

Carl Menzel
Associate
cmenzel@harriswilliams.com
+1 (804) 887-6082

WHAT WE'RE READING

GERMANY'S EVONIK BUYS HUBER'S SILICA UNIT TO BOOST SPECIALTY CHEMICALS**Reuters** 12/9/2016

Germany's Evonik agreed to buy J.M. Huber Corp.'s silica unit for \$630 million to widen its specialty chemicals business. Evonik's own silica products are mainly used to improve the wet grip of tires, whereas the deal with U.S. based Huber will widen its customer base to include makers of toothpaste, animal feed, and paints, as well to give it better access to Asia.

The acquisition from family-owned Huber is expected to close in the second half of 2017 and follows an acquisition by Evonik in May of 2016 to buy an additives businesses from Air Products and Chemicals for \$3.8 billion.

Read the full article [here](#).

ACC: U.S. CHEMICAL INDUSTRY CONTINUES TO OUTPACE INDUSTRIAL OUTPUT**Hydrocarbon Processing** 12/9/2016

The business of American chemistry is strong, and getting stronger. Despite a contraction this year, U.S. chemical production (excluding pharmaceuticals) is expected to realize overall growth of 1.6% in 2016, followed by 3.6% growth in 2017, and 4.8% in 2018.

"American chemistry is on the move," said Kevin Swift, chief economist of ACC. "The competitive advantage the U.S. still maintains, driven by access to affordable and abundant supplies of natural gas, continues to offset significant headwinds, including an overall drop in business investment, a rebalancing in the oil and gas sector, soft export markets, and a high dollar."

Read the full article [here](#).

NORTH AMERICAN AND EMEA CHEMICALS INDUSTRY CONTINUES SLOW GROWTH, BUT M&A ACTIVITY TO PICK UP**Moody's** 12/9/2016

While the North American and European chemicals industry still faces challenged growth prospects, M&A activity will likely accelerate over the next year, says Moody's Investors Service. The rating agency's outlook on the industry is stable.

Moody's expects M&A transactions to accelerate, leading to a rise in new high-yield companies. Furthermore, non-core asset divestitures and spinoffs, such as Dow Chemical Company, Albemarle Corp., and Solvay, will continue, with new spinoffs likely as well.

Moody's notes that low crude prices will benefit North American makers of specialty chemicals, such as coatings and lubricants.

Read the full article [here](#).

LINDE RESUMES TALKS TO MERGE WITH PRAXAIR, BRINGS BACK FORMER EXEC FROM RETIREMENT TO REPLACE CEO**IHS Chemical Week** 12/7/2016

The executive board of Linde has decided to resume talks about the "essential conditions" of a potential merger of equals with Praxair and has appointed Adlo Belloni as chairman of the executive board. Belloni served on the executive board from 2000 to 2014 and headed Linde's engineering division.

"With the resumption of the talks, a successful merger is now drawing near. With a succession plan in place, the necessary continuity is assured without interruption for the demanding tasks of the coming months," Wolfgang Büchele, a member of the executive board, says.

The merger would create a leader of industrial gas sales, valued at over \$60 billion, supplanting Air Liquide.

Read the full article [here](#).

RAPID URBANIZATION IN BRICS TO BOOST THE GLOBAL SPECIALTY CHEMICALS MARKET THROUGH 2020**Business Wire** 12/5/2016

Technavio analysts forecast the global specialty chemicals market to grow at a CAGR of more than 5% through 2020.

The end markets for specialty chemicals are closely linked to each other and often have an impact on adjoining markets. Customer preferences in these end markets have witnessed significant shifts, with growing demand and emphasis on sustainable products, processes, and practices. With rapid urbanization in BRICS, the need to factor in sustainable protocols across business functions is expected to drive global specialty chemicals market growth.

Read the full article [here](#).

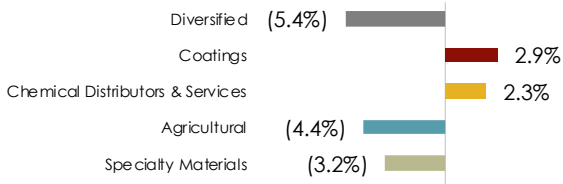
PUBLIC COMPARABLES

As of December 15, 2016 (\$ in millions, except per share amounts)

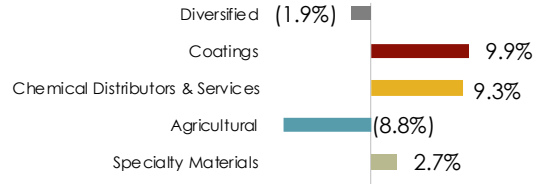
(\$ in millions except per share data)	Market Cap	TEV	Stock Performance			TEV / EBITDA	
			Current Price	52-Week		2016E	2017P
				High	% of High		
Diversified							
BASF SE	\$82,612	\$98,469	\$91.31	\$91.67	99.6%	9.3x	8.7x
Dow Chemical Company	65,433	85,283	58.33	59.00	98.9%	8.9x	8.2x
Eastman Chemical Company	11,281	17,758	76.15	78.79	96.6%	8.4x	8.0x
Albemarle Corporation	10,103	13,471	89.06	92.24	96.5%	18.0x	16.8x
Celanese Corporation	11,871	13,971	81.61	84.97	96.0%	8.9x	8.5x
Ashland Global Holdings, Inc.	7,013	8,962	110.72	125.00	88.6%	9.7x	11.7x
FMC Corporation	7,801	9,626	57.49	60.00	95.8%	13.5x	12.2x
Clariant AG	5,479	7,066	16.67	19.36	86.1%	8.3x	7.8x
Median					96.3%	9.1x	8.6x
Coatings							
PPG Industries, Inc.	\$25,370	\$29,097	\$96.07	\$117.00	82.1%	11.0x	10.6x
Sherwin-Williams Company	24,873	26,805	269.55	312.48	86.3%	13.5x	12.3x
Akzo Nobel N.V.	15,583	17,394	61.89	73.45	84.3%	7.8x	7.6x
RPM International Inc.	7,176	8,655	53.75	55.92	96.1%	12.3x	11.3x
Median					85.3%	11.6x	10.9x
Chemical Distributors & Services							
Brenntag AG	\$8,232	\$10,252	\$54.64	\$61.03	89.5%	12.1x	11.2x
IMCD N.V.	2,175	2,493	41.55	44.86	92.6%	15.7x	14.4x
Quaker Chemical Corporation	1,735	1,701	130.13	139.92	93.0%	16.0x	15.0x
Aceto Corporation	644	675	20.92	28.42	73.6%	10.2x	9.2x
Median					91.1%	13.9x	12.8x
Agricultural							
Monsanto Company	\$46,207	\$54,359	\$105.22	\$114.26	92.1%	14.9x	13.8x
Syngenta AG	37,098	40,620	401.52	446.45	89.9%	15.5x	14.0x
Potash Corporation	15,404	19,856	18.16	19.88	91.4%	14.8x	12.8x
Agrium Inc.	14,026	19,664	100.35	109.75	91.4%	11.8x	10.4x
Mosaic Company	10,415	13,471	29.64	31.54	94.0%	12.8x	11.0x
Intrepid Potash, Inc.	185	301	2.40	3.54	67.8%	NM	11.5x
Median					91.4%	14.8x	12.1x
Specialty Materials							
Compagnie de Saint-Gobain SA	\$25,265	\$33,019	\$45.20	\$46.74	96.7%	7.9x	7.3x
Solvay SA	12,284	20,056	116.38	119.44	97.4%	7.8x	7.4x
Evonik Industries AG	13,633	12,952	29.65	34.64	85.6%	5.8x	5.4x
Avery Dennison Corporation	6,383	7,639	72.26	79.27	91.2%	9.8x	9.4x
PolyOne Corporation	2,841	3,940	34.22	38.41	89.1%	9.3x	8.7x
Rogers Corporation	1,392	1,321	77.81	78.19	99.5%	10.3x	9.3x
Median					93.9%	8.6x	8.0x
Overall Median					91.8%	10.3x	10.4x

PUBLIC MARKETS OVERVIEW

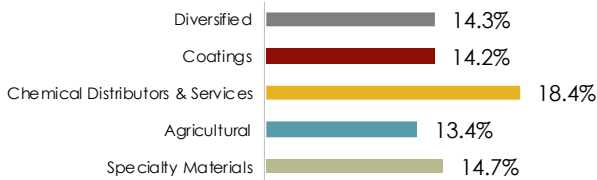
3-YEAR REVENUE CAGR (2013 – 2016E)



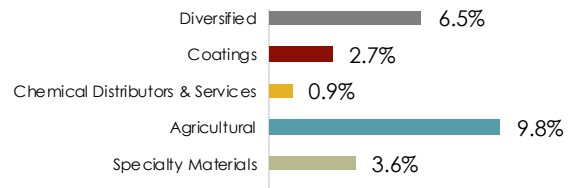
3-YEAR EBITDA CAGR (2013 – 2016E)



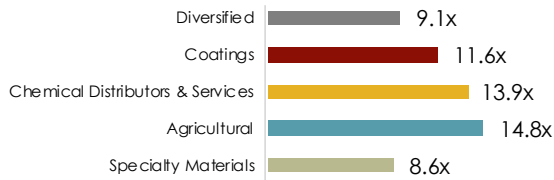
AVERAGE EBITDA MARGIN (2016E)



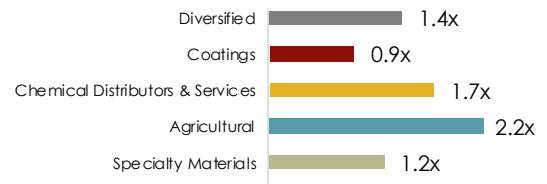
CAPEX (AS % OF REVENUE) (2016E)



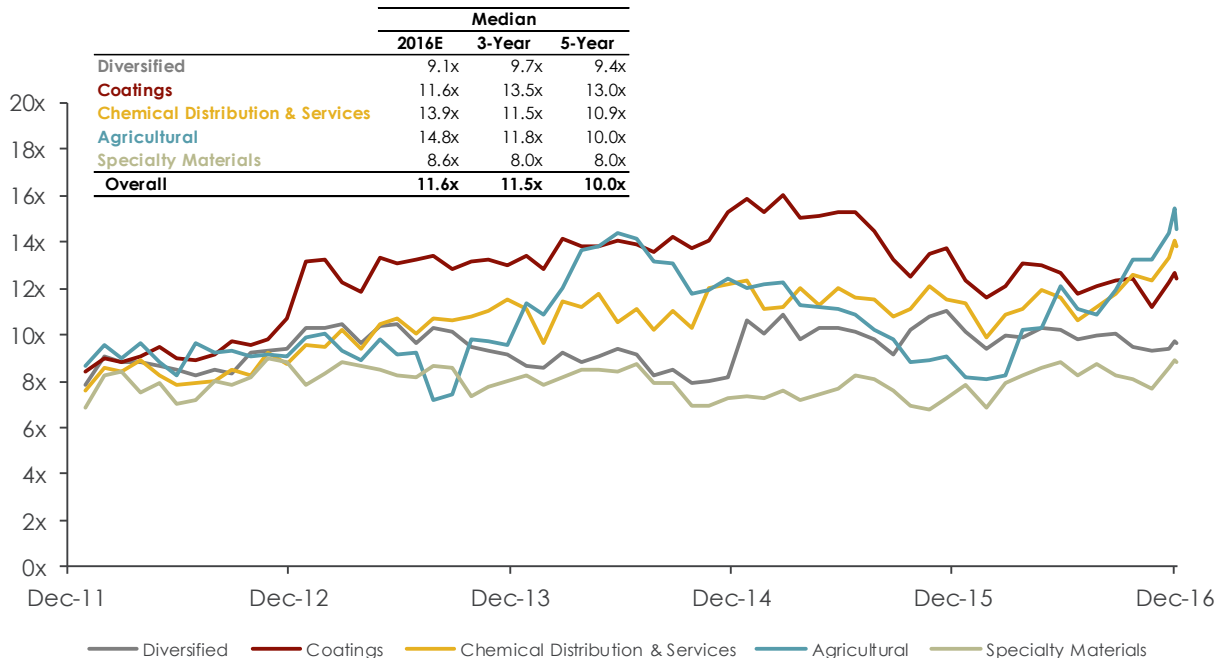
TOTAL ENTERPRISE VALUE / 2016E EBITDA



NET DEBT / 2016E EBITDA



PUBLIC COMPARABLES (MEDIAN TEV / LTM EBITDA)



M&A TRANSACTIONS

Closed Date	Target	Target Business Description	Acquirer
Announced	J.M. Huber / Silica Business	Huber's silica business manufactures silica products for industries such as consumer, animal feed, and paints.	Evonik Industries AG
Announced	Linde AG	Linde AG produces and distributes gases for applications in industry, medicine, environmental protection, and research and development. The company also offers plant engineering and supply chain services.	Praxair, Inc.
Announced	BASF Corp / Inorganic Specialties Business	BASF's Inorganic Specialties Business produces and manufactures specialty alcoholates, boranes, and alkali metals products.	Edgewater Capital Partners
Announced	SAPEC Agro SA	SAPEC Agro manufactures crop protection products and specialty crop nutrition solutions and fertilizers that help improve crop quality and yields.	Bridgepoint Advisers Group Ltd.
Announced	Pinova, Inc.	Pinova Holdings is a leading supplier of ingredients from natural and renewable sources used mainly in the production of perfumes, fragrances, and oral care products.	Salvepar Groupe
Announced	Chromaflor Technologies LLC	Chromaflor Technologies provides colorant technology solutions. Its products include architectural coatings, thermoset plastics, industrial coatings, and integrated tinting.	American Securities
Announced	Chemtura Corp.	Chemtura Corp. develops and manufactures performance-driven engineered industrial specialty chemicals, operating in the Industrial Engineered Products and Industrial Performance Products segments.	LANXESS AG
Announced	Monsanto	Monsanto engages in the production and sale of chemicals and hybrid seeds. The company's brands include Dekalb and Roundup.	Bayer AG
Announced	Canexus Corp.	Canexus Corp. primarily produces sodium chlorate and chlor-alkali products for the pulp and paper, petrochemical, and water treatment industries.	Chemtrade Logistics Income Fund
Announced	Agrium, Inc.	Agrium produces agricultural chemicals for the retail and wholesale sectors. Products include crop nutrients, crop protection products, seed, and nitrogen, potash, and phosphate.	Potash Corp. of Saskatchewan, Inc.
Announced	The Nippon Synthetic Chemical Industry Co., Ltd.	The Nippon Synthetic Chemical Industry Co. engages in the manufacture, processing, and sale of acetic acid resins. It operates in the Synthetic Resins, Acetyl and Fine Chemicals, and 'Other' segments.	Mitsubishi Chemical Holdings Corp.
12/8/2016	FiberMaterials	FiberMaterials is a leading designer and manufacturer of advanced composite materials consisting of polymer matrix composites, carbon-carbon composites, and ceramic matrix composites.	Edgewater Capital Partners
12/5/2016	EverZinc	EverZinc specializes in the manufacturing of fine zinc powders, zinc oxide, and zinc for batteries. Products are used in anti-corrosion paints, tires, pharmaceutical chemicals, ceramics, glass, and sunscreens.	OpenGate Capital
10/17/2016	CAPPELLE Pigments NV	CAPPELLE Pigments manufactures and markets pigments for paints and inks. The firm offers products for the paint, printing ink, master batch, plastics, and other industries.	Ferro Corp.
09/14/2016	Kel-Tech, Inc.	Kel-Tech provides specialty oilfield chemicals and services to production, field stimulation and drilling operations in the oil and gas market.	Clariant AG
07/20/2016	Den Braven Sealants BV	Den Braven Sealants engages in the production of sealants, adhesives, foams, and technical aerosols.	Arkema SA

Harris Williams & Co. has a broad range of industry expertise, which creates powerful opportunities. Our clients benefit from our deep-sector experience, integrated industry intelligence and collaboration across the firm, and our commitment to learning what makes them unique. For more information, visit our website.

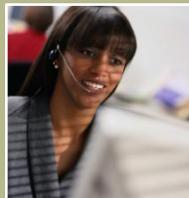
Aerospace, Defense
& Government
Services



Building Products
& Materials



Business
Services



Consumer



Energy, Power
& Infrastructure



Healthcare
& Life Sciences



Industrials



Specialty
Distribution



Technology,
Media & Telecom



Transportation
& Logistics



HARRIS WILLIAMS & Co. OFFICE LOCATIONS

UNITED STATES

Boston

Two International Place
24th Floor
Boston, Massachusetts 02110
Phone: +1 (617) 482-7501

Cleveland

1900 East 9th Street
20th Floor
Cleveland, Ohio 44114
Phone: +1 (216) 689-2400

Minneapolis

222 South 9th Street
Suite 3350
Minneapolis, Minnesota 55402
Phone: +1 (612) 359-2700

Richmond (Headquarters)

1001 Haxall Point
9th Floor
Richmond, Virginia 23219
Phone: +1 (804) 648-0072

San Francisco

575 Market Street
31st Floor
San Francisco, California 94105
Phone: +1 (415) 288-4260

Washington, D.C.

800 17th St. NW
2nd Floor
Washington, D.C. 20006
Phone: +1 202-207-2300

EUROPE

Frankfurt

Bockenheimer Landstrasse 33-35
60325 Frankfurt
Germany
Phone: +49 069 3650638 00

London

63 Brook Street
London W1K 4HS, England
Phone: +44 (0) 20 7518 8900

NETWORK OFFICES

Beijing

Hong Kong

Mumbai

New Delhi

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SOURCES

Business Wire

FactSet

Hydrocarbon Processing

IHS Chemical Week

Moody's

Reuters

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