

## Alexium

Buy

## Share price set to ignite

Materials / Diversified Chemicals

31 March 2016

## Initiating Coverage

Ticker	AJX
Stock Price	\$0.670
Target Price	\$1.20
Forecast Capital Return	79.1%
Forecast Dividend Yield	0.0%
Forecast Total Return	80.5%

## Company market data

Market Cap.	\$190.2m
Enterprise Value	\$178.6m
52 week range	\$0.44 - \$1.17
Shares out.	286.1m

Estimates changes	2015a	2016e	2017e
Core NPAT - <i>new</i>	(6.9)	(12.3)	1.7
Core EPS dil. (cents) - <i>new</i>	(3.0)	(4.5)	0.6
DPS (cents) - <i>new</i>	0.0	0.0	0.0

## Share price performance

Chart Data Not Available

## Analysts

**Olivia Bible**  
+612 8288 5408  
[olivia.bible@moelis.com](mailto:olivia.bible@moelis.com)

All figures are in AUD unless otherwise specified.

## Event

We have initiated coverage of Alexium International Group (AJX) with **BUY rating and 12 month target price of \$1.20**. We view AJX as a strategic investment leveraging increased scrutiny on stringent fire safety regulations and banning of toxic and harmful chemicals in traditional brominated and halogenated flame retardant products.

## Investment View

AJX is a US-based speciality chemicals business focused on the development of safe non-brominated chemical solutions that can be applied to surfaces to make them flame retardant.

Our BUY thesis is predicated on the following:

**The range of Alexiflam products are unique in the market place:**

To our knowledge, no other player has safe flame retardant chemistry with minimal impact to the surface's existing properties while meeting customer needs. In our opinion, regulatory change will be the biggest driving factor in AJX's market share gain in the near term. Studies have shown that brominated and halogenated products appear to be persistent and bio-accumulative and can disrupt thyroid and estrogen hormones, causing developmental effects. Since 2003, 12 US states and Washington DC have banned certain types of brominated chemicals and the EU and Australia have banned brominated and halogenated products.

**AJX has extensive IP with over 20 patents in 9 countries**

AJX is of the view that safe flame retardant chemicals would be very difficult to replicate without an infringement on its patents. The current patents are for ~20 years, no current patent has <16 years to expiry and they cover all markets AJX currently operates in and seeks to enter.

**AJX's partnership system with toll manufacturers, finishers and sales agents provide global scale and create barriers to entry**

AJX's partnerships create a huge advantage and increases its accessibility to global customer opportunities. Competitors cannot handle the wide range of supply chain variations AJX can by partnering with these companies. It also makes AJX far more flexible if a change to a customer's supply chain arises.

Y/E June 30	2015a	2016e	2017e
EBITDA	(6.4)	(12.1)	2.5
EV/EBITDA	(28.1)x	(14.7)x	70.3x
Core NPAT	(6.9)	(12.3)	1.7
Core EPS (Diluted) cents	(3.0)	(4.5)	0.6
P/E	(22.4)x	(14.9)x	114.3x
EPS growth	56.8%	51.1%	(113.0)%
DPS (cents)	0.0	0.0	0.0
Yield	0.0%	0.0%	0.0%
Dividend Payout Ratio	0.0%	0.0%	0.0%
Net Tangible Assets (\$/share)	0.04	0.02	0.01

All figures are in AUD.

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## Executive summary

### Business summary

- Alexium International Group (AJX) is a US-based speciality chemicals business focused on the development of chemical solutions that can be applied to surfaces to make them flame retardant.
- AJX's core business is to develop environmentally friendly (non-brominated) chemical solutions that can be deployed in the commercial and military sector.
- In addition to developing stand-alone specialty chemical solutions, AJX also specialises in developing additives that work with a textile's existing physical properties to make them flame retardant though not detract from the textile's feel e.g. the leather will retain its soft feel.
- AJX has established strategic partnerships in order to rapidly scale its go-to-market capabilities using an asset light operating model. AJX partners with a number of sales agents to initiate trials with potential customers. The customer interacts directly with AJX during the sales cycle and once a suitable chemical formulation is finalised (usually takes 6-18 months), AJX partners with toll manufacturers to make that formulation in the quantity the customer requires. The mixed chemistry is then sent to a commission finisher that applies it to the customer's fabric and the final treated product is then sent to the customer.

### Investment positives

#### **The range of Alexiflam products are unique in the market place:**

1. Environmentally friendly and non-toxic - passes strict new environmental regulation;
2. Cost effective; and
3. Performance advantage - the formulation improves, or limits damage to the original product's characteristics. It can also be laundered.

To our knowledge, no other player has environmentally friendly flame retardant chemistry with minimal impact to other properties while meeting the customer needs. Most competitors are still producing brominated or halogenated products and at a higher price point to customers as more chemicals need to be used to achieve the same flame retardant result.

The cost advantage of AJX's proposal to customers is threefold. Firstly, less volume of AJX's formulations is needed to make surfaces flame retardant compared to traditional flame retardant treatments. Secondly, because AJX's formulations can be applied to a number of different surfaces, a customer could use a cheaper material for the product and still be able to treat it. Finally, AJX's treatments are longer lasting than traditional treatments, thereby reducing the replacement cycle.

#### **AJX has an extensive IP portfolio with over 20 patents in 9 countries**

- AJX is of the view that safe flame retardant chemicals would be very difficult to replicate without an infringement on its patents.
- The current patents are for ~20 years, no current patent has <16 years to expiry and they cover all markets AJX currently operates and seeks to enter.

**AJX's partnership system with toll manufacturers, finishers and sales agents provide global scale and create barriers to entry**

- This structure creates a huge advantage for AJX over other major players and provides AJX with accessibility to global customer opportunities. Competitors cannot handle the wide range of supply chain variations AJX can by partnering with these companies. It also makes AJX far more flexible if a change to a customer's supply chain arises.

**We see upside risk to our estimates**

- We view our revenue growth rates for the different end-user industries as conservative. We note that AJX's sales pipeline (trial customers) is ~10x the size of its list of "won" clients. As regulation continues to push the flame retardant market towards solutions like AJX's, the company should continue to convert those trial customers into sales and pursue new sales opportunities. In our numbers, we have assumed that AJX converts 1 trial customer into a revenue generating customer per year.
- Similarly, we have taken the conservative approach on gross profit margins. In the past management have guided to average GP margins of 40%, we are currently estimating mid 30% margins to allow for some margin erosion in order to win new customers.

**Investment risks**

**As it ramps up its production, AJX's working capital needs will grow**

- Currently, AJX carries no debt. We estimate that this will increase as commercialisation ramps up and working capital needs grow.

**Expansion overseas (especially into Asia) may pose risks for AJX's IP**

- AJX has plans to expand into new geographic markets including parts of Asia. Expanding into China may be risky in terms of protecting AJX's IP. Having said this, management have said that they are targeting specific opportunities that are "customer pull" rather than "product led". They have yet to experience a patent infringement.

**Valuation**

- We issue a BUY rating and a 12 month target price of \$1.20, an estimated 80.5% total return.
- Our 12 month target price is derived from the future value of our fundamental valuation, less dividends to be received between now and the target date.

## What is Alexium?

### Background

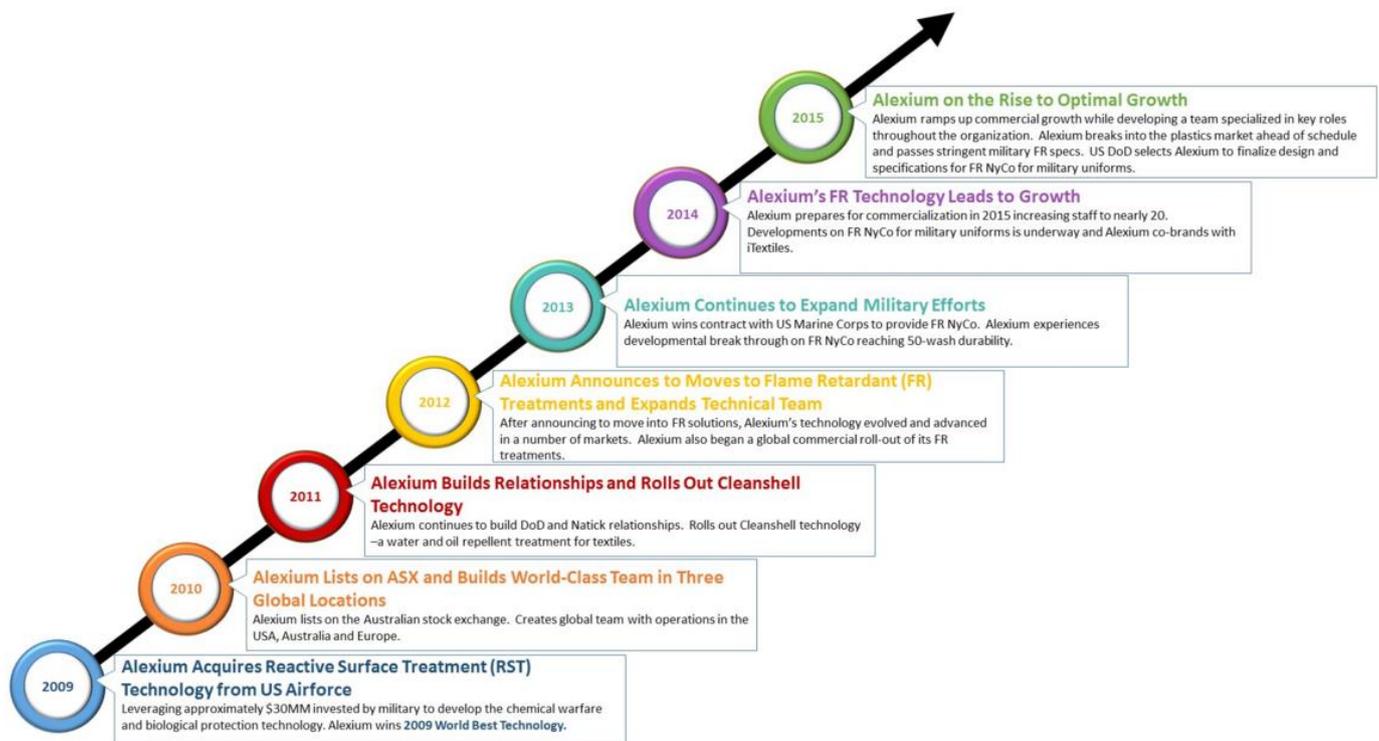
*AJX's flame retardant chemical formulations differentiate themselves from existing treatments:*

1. *Environmentally friendly and non-toxic;*
2. *Cost effective; and*
3. *Improves or limits damage to the original product's characteristics.*

The company was established in 2009 when it acquired Reactive Surface Treatment Technologies from the US Airforce. Its primary purpose was for chemical and biological warfare protection. In 2010, AJX listed on the ASX and in 2011 it developed a patented flame retardant chemical formulation. The formulation was different from existing treatments:

- Environmentally friendly and non-toxic – passes strict new environmental regulation;
- Cost effective; and
- Performance advantage – the formulation improves, or limits damage to the original product's characteristics. It can also be laundered.

Figure 1: AJX's history – from the lab to the market



Source: AJX website

## Drivers of growth and market share gains

A report by MarketsandMarkets (a leading markets research firm) suggests that the worldwide chemical flame retardant market was worth ~US\$7bn in 2014 and is expected to increase by an average CAGR of 5.7% p.a., rising to US\$10bn by 2019. Non-halogenated or non-brominated products (AJX products) are expected to have the highest rate of annual growth of 7.5% p.a. over the next 5 years. In addition, AJX's major markets are North America and Europe which account for over 46% of the world's flame retardant chemical consumption. Given AJX's market leading position, partnerships with sales, toll manufacturers and commission finishers and safe products that meet stringent regulation, we expect that AJX will grow above the market growth rate.

## Banning of brominated and halogenated products

*Stringent fire safety regulations are causing companies to look for more effective performance in flame retardant treatments. At the same time, there is a push to ban brominated and halogenated products in traditional flame retardant treatments that could cause health issues.*

In our opinion, regulatory changes will be the biggest driving factor in AJX's market share gain in the near term. This is driven by an increase in understanding about the harmful side effects of brominated and halogenated products. Approximately 80 different types of brominated flame retardant are used commercially. The more widely used are the polybrominated diphenyl ethers (PBDEs).

Much of the concern is due to the fact that these chemicals appear to be persistent and bioaccumulative. Recent studies have found that children and adults pick up the chemicals through food (especially fish) and from direct indoor exposure through dust, especially from window surfaces and carpet. Traces have also been found in breast milk, thereby allowing infants to ingest the compounds. Studies on laboratory animals have found that these chemicals disrupt thyroid and estrogen hormones, causing developmental effects such as permanent changes to the brain and to reproductive systems.

In the US since 2003, 12 US states and Washington DC have imposed bans on various types of PBDEs (pentaBDE, octaBDE, and decaBDE). California began this trend by banning the manufacture, processing, or distribution of any product containing more than 0.1% of pentaBDE or octaBDE. Subsequently, a number of other states imposed the same restrictions. Specifically, from 2004 to 2012, the District of Columbia, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, New York, Oregon, Rhode Island, Vermont, and Washington enacted legislation that banned products containing a certain concentration of pentaBDE or octaBDE. The District of Columbia, Maine, Maryland, Oregon, Vermont, and Washington also banned the sale, distribution for sale, or retail sale of mattresses, upholstered furniture, electronics, and/or transportation equipment that contains more than 0.1% of decaBDE. Those laws have some exemptions, such as used products. In March 2016, the mayor of Washington DC signed a bill to ban toxic flame retardant chemicals in all household products. AJX does not use any of the chemicals that were banned. Management believe that it is only a matter of time before the remaining states in the US will follow suit and AJX is working with Congressmen and Senators from all states to educate them on the significance of Washington DC passing this law.

In Europe, EU legislation was adopted in 2004 to ban the use of PBDEs on plastics, textiles and electrical equipment etc. Sweden adopted then reversed a ban on decaBDE in textiles, furniture and some cables. Norway implemented a ban on decaBDE in textiles, furniture, insulation, as well as the manufacture, import and sales of decaBDE. In Australia, importation of PBDEs ceased in mid-2005 but it wasn't until 2007 that the importation and manufacture of PBDEs were banned.

## Product manufacturers decreasing liability exposure

At the same time jurisdictions are banning brominated and halogenated products, companies still need to apply some flame retardant treatment in order to comply with stringent fire safety regulations. Even if they are in a jurisdiction that does not currently ban brominated and halogenated products, companies are mindful that using these treatments could open the door to future liability. Hence, many are now looking for a safe and environmentally friendly way to treat their products. For example, office furniture manufacturer Herman Miller, has a “Design for the Environment” program that is aiming to eliminate hazardous components, including halogenated flame retardants. The company is trying to eliminate all halogenated compounds from new products being developed, and they will then work at redesigning existing products.

## New end-user markets

*Whilst not expressly estimated, we believe significant revenue upside lies in AJX expanding into new markets i.e. flame retardant solutions for the carpet industry.*

Whilst we have factored in market share growth in each of the divisions outlined above, we have not explicitly estimated new sectors for AJX. We believe this will be one of the company’s major avenue for growth as its chemical formulas can relatively easily be applied to other surfaces and other countries.

For instance, not included in our estimates or management’s CY16 revenue forecast of ~US\$18.5m is revenue from its latest customer win in the floor covering sector. On 23 March, AJX announced that it received its first purchase order in the floor covering market. The customer was one of the world’s top 4 carpet suppliers and is located in Dalton, GA. According to industry sources, 80% of the US carpet market supplies 45% of the world’s carpet and is all controlled by mills within a 65 mile radius of Dalton, GA. This is less than 200 miles from AJX’s operations in Greer, SC and AJX believes this relative proximity could drive future customer wins. The US market for flame retardant chemicals for carpet is expected to grow by ~5% p.a. to 2019.

## IP portfolio protects AJX’s position as only safe player

*To our knowledge, no other player has environmentally friendly flame retardant chemistry with minimal impact to other properties. AJX’s patents are global and last 20 years.*

AJX has an extensive IP portfolio with over 20 patents in 9 countries and 3 patent applications are pending. Those 3 applications specifically relate to flame retardant chemical treatments and emulsions and overlap with the existing patent library. No other player has environmentally friendly flame retardant chemistry with minimal impact to other properties while meeting the customer needs. Most competitors are still producing brominated or halogenated products and at a higher price point to customers as more chemicals need to be used to achieve the same result. AJX is of the view that safe flame retardant chemicals would be very difficult to replicate without a company infringing on one or more of its patents. The current patents are for ~20 years, no current patent has <16 years to expiry and they cover all markets AJX currently operates and seeks to enter.

## AJX's process – sales through to supply contract stage

*AJX's sales process uses its proprietary chemistry as a base and then tailors it to customers' requirements. The process from initial fabric test to a supply contract usually takes 6-18 months.*

### R&D / sales cycle – usually 6-18 months but should decrease

AJX's proprietary chemistry (i.e. Alexiflam and its variations detailed in the next section) is patented and the cost associated with its development has already been capitalised. The sales cycle uses Alexiflam as a base and develops a formulation specific to that customer's requirements, fabric types and processes. This development process for a customer (initial fabric test to a supply contract) usually takes 6-18 months but should decrease over time as more players in each industry use AJX products and the changes required between industry competitors is minimal e.g. instead of 5 lab trials, AJX may only need 2.

Initially in the sales cycle, AJX will discuss with clients and partners the performance requirements, business opportunity and technical feasibility. If needed, AJX will sign non-disclosure agreements and draft formal development plans. Some of these agreements involve cost sharing commitments.

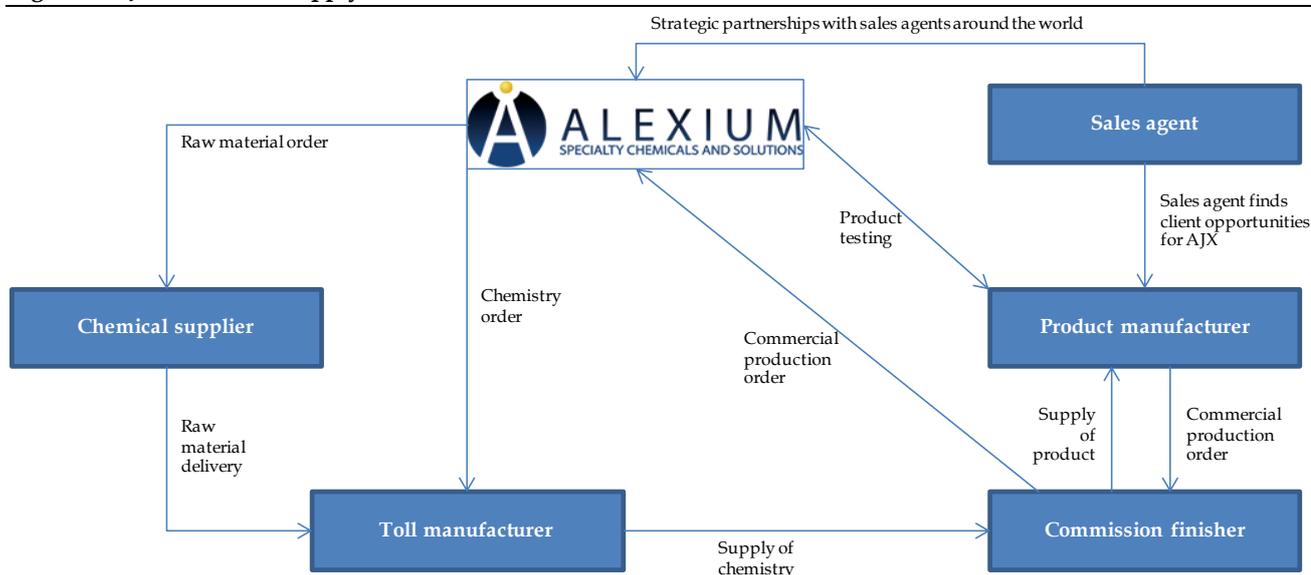
While AJX has the capability to treat samples for initial demonstration, the ultimate goal is to deliver chemicals and solutions for the customer to process material on-site. Where applicable, AJX will formalise the business relationship through licensing, joint venture or co-branding agreements.

### Sales and supply chain

*AJX has established strategic partnerships in order to rapidly scale its go-to-market capabilities using an asset light operating model. It partners with global distribution and sales agents, toll manufacturers and commission finishers.*

AJX has established strategic partnerships in order to rapidly scale its go-to-market capabilities using an asset light operating model. Given the size and scale of the global chemical markets, AJX partners with a number of sales agents to initiate trials with potential customers. The customer interacts directly with AJX during the sales cycle and once a suitable chemical formulation is finalised, AJX partners with toll manufacturers to make that formulation in the quantity the customer requires. The mixed chemistry is then sent to a commission finisher that applies it to the customer's fabric and the final treated product is then sent to the customer. The figure below depicts the flow of chemicals, goods and orders. It is important to note that as soon as the "know-how" (i.e. the formulation and how to apply it to the product) is sold to the customer, AJX is not liable for mistakes in treatment.

Figure 2: AJX's sales and supply chain



Source: Company documents

### Partnerships

AJX's global distribution and sales agent network were selected based on geography and expertise in AJX's growth sectors. The partnership with iTextiles (distributes AJX's products in Europe and Asia) is the most established partner (agreement was signed in June 2015) and has already generated sales. The other 6 partnerships (all established in 2016) have 42 agents representing AJX target markets and over 50% have already initiated lab trials/opportunities.

**Figure 3: AJX's global distribution and sales agent network**

Global Distribution and Sales Agent Network		
	* Europe, Asia * 2 senior sales executive appointed to service a growing European client base	Targeting initial sales opportunities in Transport and Military & Workwear segments
	* Brazil * 5 sales reps between Sao Paulo & Brasilia	Extensive experience in sales to Textiles Customers with specific experience in Workwear, Carpet and Transportation Industries
	* Australia & New Zealand * 9 sales reps across both countries	Three reps that specialise exclusively in Textiles Markets: Transportation, Workwear, Carpet, Upholstery
	* Southeast Asia: Myanmar, Vietnam, Indonesia, Thailand, Malaysia, Singapore * 12 sales reps across 6 countries	Two specialised polymers & formulated compounds sales groups
	* Israel & Mediterranean * 4 sales reps with key relationships	Key target markets: Textiles (workwear, military, bedding, transportation), polymers, plastics
	* Northern & southern Europe * 2 sales reps with over 20+ years of sales	Textiles markets: workwear, transportation, bedding and military
	* South Eastern USA * 2 sales reps	Sales into the polymers and textiles markets with over 25 years of experience of B2B into our target markets

Source: Company documents

### Toll manufacturing and commission finisher

InChem Inc. and Marlin Inc. make the proprietary Alexiflam chemistry. AJX works with other toll manufacturers to make other Alexiflam variants. Other partners blend Alexiflam chemistries into complete formulations ready to use.

Euroflam is a finisher in Europe and does commission finishing for a lot of customers in the UK. In other cases, especially in the US, AJX will deal directly with a fabric producer who puts the company in touch with their chosen "finisher".

Figure 4: AJX's toll manufacturing and commission finisher partnerships

Toll Manufacturing - Scale through asset light operating model		
	<ul style="list-style-type: none"> <li>* Lenoir, NC</li> <li>* 10+ mixing vessels</li> <li>* 80k sq.ft. property</li> </ul>	<ul style="list-style-type: none"> <li>* Chemical production of Alexium's core products facilitating global supply to customers and distributors</li> <li>* Allows Alexium to scale through an asset light operating model</li> </ul>
	<ul style="list-style-type: none"> <li>* Rock Hill, SC</li> <li>* 46 acre site with 75k sq.ft. distribution centre</li> <li>* 13 specialized reactors</li> </ul>	
Global Supply Chain Infrastructure & Partnerships		
	<ul style="list-style-type: none"> <li>* Physical location Belgium</li> </ul>	<ul style="list-style-type: none"> <li>* Go-to-market global partnership initially targeting Europe and Asia</li> <li>* Market leading, vertically integrated Supply Chain &amp; Logistics Group.</li> <li>* VLS-Group has worldwide infrastructure &amp; networks in place to support Alexium growth in Europe, the Middle East, Africa, all corners of Asia, and the Americas.</li> </ul>
	<ul style="list-style-type: none"> <li>* United Kingdom and Europe</li> </ul>	<ul style="list-style-type: none"> <li>* Customer and commercial partner for Alexium's FR products in the UK and Europe</li> <li>* Euroflam offers bespoke flame retarding and soil and stain treatment service for Domestic and Contract standards for Upholstery, Curtaining, Bedspreads and soft furnishing.</li> </ul>

Source: Company documents

This structure creates a huge advantage for AJX over other major players. Competitors cannot handle the wide range of supply chain variations AJX can by partnering with these companies. It also makes AJX far more flexible if changes to a customer's supply chain arises.

## Alexium's base chemistries

*AJX has 4 base chemistries that it uses in conjunction with a range of other chemicals (e.g. blenders, softeners) to make a product flame retardant and protect its existing attributes.*

AJX currently sells 4 series of chemistries that can be customised for clients:

1. Alexiflam
2. Alexiflam-NF
3. Alexiflam-SYN
4. Alexiflam SYN-FILL

AJX uses these 4 chemistries as a base and then mixes them with a range of blenders, softeners etc to make a customer's product flame retardant and protect (or even enhance) the surface's existing attributes. For instance, in the case of a car manufacturer, AJX would use Alexiflam-NF and blend it with a range of other chemicals including softeners so that the seats in the car would be durable but retain their softness.

The fire retardant chemistry works by "sucking out the oxygen" to stop a flame igniting or slow down a burn. The figure below is a snapshot from a clip on AJX's website that compares an untreated and treated military uniform, as well as the cost of traditional flame retardant treatments vs. AJX.

**Figure 5: Comparison of military uniform untreated and treated with Alexiflam**



Source: AJX website

The cost advantage of AJX's proposal to customers is threefold. Firstly, less volume of AJX's formulations is needed to make surfaces flame retardant compared to traditional flame retardant treatments. Secondly, because AJX's formulations can be applied to a number of different surfaces, a customer could use a cheaper material for the product and still be able to treat it. Finally, AJX's treatments are longer lasting than traditional treatments, thereby reducing the replacement cycle.

### Alexiflam

Alexiflam is the flame retardant treatment for 100% polyester, 100% cotton, and 50/50 NyCo (Nylon-Cotton blend) fabrics. It is durable, halogen-free, cost-effective and meets many international FR standards. It can be easily applied with conventional textile equipment and does not melt or drip.

### Alexiflam-NF

Alexiflam-NF is the flame retardant treatment for cotton rich and wool rich blends. It is currently being used in the transportation market for automotive seating. It is durable, halogen-free, cost-effective and meets many international FR standards.

**Alexiflam-SYN**

Alexiflam-SYN is the flame retardant treatment for 100% polyester, 100% acrylic, 100% nylon and synthetic-rich blends. It comes in either solvent or aqueous based solutions. This chemistry can also be used in non-textile applications including films and resins.

**Alexiflam SYN-FILL**

Alexiflam SYN-FILL is targeted for the plastics market including films, adhesives, fibers, masterbatch and composites. This chemistry is durable, halogen free and cost effective.

## Alexium's target industries

AJX's treatments are compatible with a variety of textile and non-textile applications commonly used in the following industries:

1. Bedding and upholstery;
2. Military and workwear;
3. Transportation;
4. Outdoor fabrics;
5. Plastics; and
6. Floor coverings.

We understand that typically, a customer provides 12 month order forecasts and open lines of communication exist with customers to determine any spikes in demand or seasonality issues within markets. Customers are typically highly risk averse and dislike change to their supply chain; therefore, although AJX only receives a 12 month order forecast, it is confident that the customer base will be sticky.

For each end-user market detailed below, we use the MarketsandMarkets industry growth rates and, given AJX's superior product, we assume AJX will achieve above market growth rates. Our understanding is that the growth rates in the MarketsandMarkets research are internal growth rates e.g. a company that has made 100,000 beds this year will hope to sell 105,900 next year and will subsequently need more flame retardant chemicals for those additional beds. In addition to these market growth rates, we have assumed that AJX converts 1 trial customer to a revenue contract per end-user market per year. Given the regulation changes, positive feedback from existing customers and AJX's superior product, we would think that they would convert more than 1 customer per year, however, we have preferred to remain conservative.

### Bedding and decorative fabrics – 25% of FY17 revenue

*The flame retardant textiles sector is forecast to grow at a 5yr CAGR of 5.2% to 2019. AJX is expecting CY16 revenue of US\$5.3m.*

AJX estimates that the US market size in the home furnishings sector for flame retardant chemicals is US\$120m p.a., and MarketsandMarkets forecast this to grow at 5yr CAGR of 5.2% to 2019.

AJX's Alexiflam product is mainly used for topic flame retardant treatments, pad and back-coating applications and foaming. Many existing fillings and textiles materials used in this industry are both flammable and prone to dirt and dye transfer. In 2015, Alexium partnered with major bedding and fabric suppliers to provide custom-developed flame retardant treatments that ensured minimal disruption to the characteristics of the original product, such as durability and softness.

AJX is engaged with 12 customers in the bedding industry, and revenue has been received from trial production runs in CY15 from 3 customers. It is also engaged with 12 customers in the decorative fabrics industry; again, trial production runs have been received from 3 customers. Management estimates that CY16 revenue of US\$5.3m (split 22% 2H16 and 78% 1H17). Our future estimates incorporate a US revenue growth rate of 7.2% (AJX receives an additional uplift when US revenue is translated into AUD) plus an additional revenue customer per year.

It is our understanding that the home furnishings sector has higher margins than traditional finishing applications. AJX guidance for home furnishings gross profit margins is 40-60%. We have taken the conservative approach

and assumed 45% gross margins to allow for some margin erosion for AJX to win new customers.

**Figure 6: Moelis estimates for bedding and decorative fabrics**

A\$m	2H16	FY17	FY18	FY19	FY20
Total market revenue opportunity (USD)	60	123	130	136	140
No. revenue customers	6	7	8	9	10
Sales (USD)	1.2	7.4	9.2	11.2	13.2
Sales (AUD)	1.6	10.5	13.2	16.2	19.1
% chg	0.0%	548.4%	25.0%	22.6%	18.5%
Gross Profit	0.7	4.7	5.9	7.3	8.6
Margin	45%	45%	45%	45%	45%

Source: Moelis estimates

### Military and work wear- 15% of FY17 revenue

*The US military and work wear sector is worth US\$245m p.a. AJX is expecting CY16 revenue of US\$2.5m.*

AJX estimates that the US market size in the military and work wear sector is US\$245m p.a. We have assumed a relatively low rate of growth for this industry, ~2% p.a., however, we acknowledge that sales would most likely grow in-line with US military spend which may be higher than 2% growth. Once again, we've also assumed that AJX converts 1 trial customer to a revenue contract per end-market user each year.

In 2015 AJX was selected by the Department of Defense as its key partner for new fire retardant uniforms, giving weight and legitimacy to the AJX suite of chemistries. Previously used flame retardant treatment on the uniforms made them non-breathable, wore away after a few washes and the treatment needed to be applied to more expensive fabric. The Alexiflam product provides a safer, more durable and eco-friendly flame retardant treatment for nylon-cotton fabric which could potentially be rolled out for all military personnel. As a result, AJX is now working with several defense sector contractors to develop next generation defence materials treated with Alexium chemicals.

AJX estimates CY16 revenue from this division is estimated to be US\$2.5m (22%/78% 2H16/1H17 split). Growth opportunities exist via the continued roll out of US military programs (the current contract is just with the US Marine Corps) and expansion into the work wear market. AJX is currently engaged in trials with 7 additional customers.

AJX guidance for defense sector gross profit margins is 40-70%. Once again, we have been conservative and assumed 45% gross margins.

**Figure 7: Moelis estimates for military and work wear**

A\$m	2H16	FY17	FY18	FY19	FY20
Total market revenue opportunity (USD)	123	250	255	260	265
No. revenue customers	1	2	3	4	5
Sales (USD)	0.6	4.5	6.5	9.2	12.1
Sales (AUD)	0.8	6.4	9.2	13.2	17.5
% chg		730.3%	44.6%	43.9%	32.2%
Gross Profit	0.3	2.9	4.1	6.0	7.9
Margin	45%	45%	45%	45%	45%

Source: Moelis estimates

## Automotive and transportation – 23% of FY17 revenue

*The flame retardant transport sector is forecast to grow at a 5yr CAGR of 5.9% to 2019. AJX is expecting CY16 revenue of US\$4.7m.*

AJX estimates that the US market size for flame retardant chemicals in the automotive and transportation sector is US\$50m p.a and MarketsandMarkets forecast this to grow at 5yr CAGR of 5.9% to 2019. AJX's products have applications in public transportation, airline and automotive upholstery. It can be applied to wool, cotton and natural fibre blends. AJX's core advantage in this sector is that its treatment is low weight and maintains the inherent fabric properties i.e. the leather on the seats remain soft.

Alexium is engaged with 8 customers (mainly in Europe) across the transportation upholstery market. Revenues have been received for successful initial trials from 5 customers, leading to AJX scaling up commercial production trials with its customer base.

AJX estimates CY16 revenue from this division to be US\$4.7m (22%/78% 2H16/1H17 split). Our future estimates incorporate a US revenue growth rate of 7.9% (AJX receives an additional uplift when US revenue is translated into AUD), plus an additional revenue customer per year.

The transport sector has very high volumes with lower margins. Management has guided to gross profit margins of 30-50%, we have assumed 35%.

**Figure 8: Moelis estimates for transport sector**

A\$m	2H16	FY17	FY18	FY19	FY20
Total market revenue opportunity (USD)	25	53	56	59	61
No. revenue customers	5	6	7	8	9
Sales (USD)	1.0	6.7	6.9	8.6	10.2
Sales (AUD)	1.4	9.5	9.8	12.3	14.8
% chg	0.0%	558.6%	3.3%	25.4%	19.9%
Gross Profit	0.5	3.3	3.4	4.3	5.2
Margin	35%	35%	35%	35%	35%

Source: Moelis estimates

## Outdoor fabrics – 11% of FY17 revenue

*AJX is expecting CY16 revenue of US\$2m.*

AJX estimates that the US market size for flame retardant chemicals in the home furnishings sector is US\$50m p.a. AJX is expecting CY16 revenue of US\$2m (22%/78% 2H16/1H17 split). Our future estimates assume a US revenue growth rate of 10.2% (higher than the home furnishings sector), plus the uplift from an additional revenue customer each year.

AJX's products can be applied to 100% acrylic, polyester and nylon fabrics, allowing its use in products such as awnings, tents and furnishings. The company is engaged with 8 customers, scale up trials have been conducted with 3 companies and in CY15 revenue was received from 2 companies.

The outdoor sector has very low variable costs with their lightweight fabrics and, as such, we have assumed a 45% gross margin, in-line with the home furnishings sector.

**Figure 9: Moelis estimates for outdoor fabrics**

A\$m	2H16	FY17	FY18	FY19	FY20
Total market revenue opportunity (USD)	25	53	55	58	60
No. revenue customers	2	3	4	5	6
Sales (USD)	0.4	3.2	4.1	5.8	7.6
Sales (AUD)	0.6	4.5	5.8	8.3	11.0
% chg		641.1%	28.2%	42.6%	33.0%
Gross Profit	0.3	2.0	2.6	3.7	5.0
Margin	45%	45%	45%	45%	45%

Source: Moelis estimates

## Coatings and Polymers – 26% of FY17 revenue

*The coatings and polymers sector is AJX's highest potential sector in terms of revenue. We have estimated US revenue growth of 11.7% p.a. and AJX is estimating CY16 revenue of US\$4m.*

AJX estimates that the US market size for flame retardant chemicals in the coatings and polymers sector is US\$220m p.a. and has extremely high revenue potential – the highest sector for AJX. MarketsandMarkets have forecast this to grow at 5yr CAGR of 6.7% to 2019 and we estimated US revenue growth of 11.7%, plus an additional revenue contract per year.

The coatings and polymers sector offers an opportunity in the non-textile market, where toxic FR products are common. Noting the potential growth and lack of textile flame retardant companies entering this market, AJX developed 'Alexiflam-SYN-FILL' which can be used in composites, adhesives, laminations, resins, films and coatings. Potential end uses include moulded plastics, building construction and industrial fibres and cabling. AJX is engaged with 9 companies, with 4 scale-up trials in progress and revenue received from 1 company in late 2015.

AJX's estimates CY16 revenue to be US\$4m. Further modification of Alexiflam-SYN-FILL and research and development into speciality surface technologies will enable penetration into other materials in the sector. Management have guided to gross margins of 20-40%, we are estimating 25%.

**Figure 10: Moelis estimates for coatings and polymers**

A\$m	2H16	FY17	FY18	FY19	FY20
Total market revenue opportunity (USD)	110	235	250	267	275
No. revenue customers	1	2	3	4	5
Sales (USD)	0.9	7.6	12.0	18.6	25.8
Sales (AUD)	1.2	10.7	17.1	26.8	37.5
% chg	0.0%	775.0%	58.9%	57.1%	39.8%
Gross Profit	0.3	2.7	4.3	6.7	9.4
Margin	25%	25%	25%	25%	25%

Source: Moelis estimates

## Financials

### P&L

*We expect AJX to be EBITDA positive in FY17E.*

**Figure 11: P&L – Moelis estimates**

A\$m	FY15A	FY16E	FY17E	FY18E	FY19E	FY20E
Total Sales	0.1	6.6	41.7	55.1	76.9	99.9
Grant income	0.3	0.5	0.5	0.5	0.5	0.5
<b>Total revenue</b>	<b>0.4</b>	<b>7.2</b>	<b>42.2</b>	<b>55.6</b>	<b>77.4</b>	<b>100.5</b>
% chg	59%	1755%	490%	32%	39%	30%
<b>Gross Profit</b>	<b>0.0</b>	<b>2.1</b>	<b>15.7</b>	<b>20.4</b>	<b>28.0</b>	<b>36.0</b>
<i>GP Margin</i>	30%	32%	38%	37%	36%	36%
Admin and other expenses	(0.8)	(1.3)	(1.4)	(1.4)	(1.4)	(1.5)
<i>% employee expenses</i>	28%	33%	31%	31%	31%	30%
Employee expenses	(3.0)	(4.1)	(4.4)	(4.5)	(4.6)	(4.8)
<i>% sales</i>	5033%	62%	11%	8%	6%	5%
R&D expenses	(0.9)	(1.9)	(4.2)	(5.5)	(7.7)	(10.0)
<i>% sales</i>	1452%	27%	10%	10%	10%	10%
Professional expenses	(0.9)	(3.0)	(2.7)	(2.4)	(2.2)	(1.9)
Marketing expenses	(0.8)	(1.0)	(1.1)	(1.1)	(1.1)	(1.1)
Share based payments	(0.4)	(3.4)	0.0	0.0	0.0	0.0
<b>Total Operating Costs</b>	<b>(6.7)</b>	<b>(14.7)</b>	<b>(13.6)</b>	<b>(14.9)</b>	<b>(17.0)</b>	<b>(19.3)</b>
<b>EBITDA</b>	<b>(6.4)</b>	<b>(12.1)</b>	<b>2.5</b>	<b>6.0</b>	<b>11.5</b>	<b>17.2</b>
<i>EBITDA to Sales Margin</i>	-10744%	-183%	6%	11%	15%	17%
% chg	133%	91%	-121%	137%	91%	50%
D & A	(0.1)	(0.2)	(0.3)	(0.5)	(0.7)	(1.0)
<b>EBIT</b>	<b>(6.5)</b>	<b>(12.3)</b>	<b>2.2</b>	<b>5.5</b>	<b>10.8</b>	<b>16.2</b>
% chg	129%	90%	-118%	148%	95%	51%
Net interest income/(expense)	(0.4)	0.1	0.1	0.3	0.5	0.6
Less income tax	0.0	0.0	(0.7)	(1.7)	(3.4)	(5.0)
<b>NPAT Underlying</b>	<b>(6.9)</b>	<b>(12.3)</b>	<b>1.7</b>	<b>4.1</b>	<b>7.9</b>	<b>11.8</b>

Source: Company reports and Moelis estimates

*We view our sales estimates as conservative as it only factors in 1 new contract win per end-user market per year and does not include sales into new markets.*

We view our revenue growth rates for the different end-user industries as conservative. We note that AJX's sales pipeline (trial customers) is ~10x the size of its list of "won" clients. As regulation continues to push the flame retardant market towards solutions like AJX's, the company should continue to convert those trial customers into sales and pursue new sales opportunities.

Similarly, we have taken the conservative approach on gross profit margins. In the past, management has indicated that the average group GP margin is ~40%. We've estimated mid 30% GP margins to allow for some margin erosion in order to win new customers.

We anticipate that as AJX ramps up its commercial capability, admin, employee and R&D expenses will significantly increase. Below is a detailed look at AJX's expense profile.

- **Admin and other expenses** – We view that admin and other expenses are more closely correlated to employee expenses. We expect that these will likely to grow over the course of the next 12 months and level off as hiring slows down.
- **Employee expenses** – In our view, AJX will continue to increase its workforce over the next 12 months as it continues to grow to keep up with increases in product demand to help add operational expertise to new market sectors.
- **R&D expenses** – As AJX's business model is centered around providing a drop-in solution that a customer can use in their facility, every customer

opportunity is unique and a development effort goes into every opportunity AJX pursues. Different fabric types require different solutions or the customer may have some specific criteria that the product needs to meet e.g. wash durability. AJX has to examine and test each opportunity to ensure that the chemistry (once applied) passes the flame retardant test but also meets any other customer demands that may be required. Whilst the base chemicals (Alexiflam and the variations) are capitalised, the costs incurred to test the individual customer's chemical formulation are part of opex as it is part of customer development and not intangible asset development. In our view, these R&D costs are likely to scale with sales.

- **Professional expenses** – According to AJX, a large portion of these costs were related to accounting and legal fees for the F-1 registration statement AJX filed at the start of FY16. Management expects this expense type to decrease from the \$1.6m in 1H16.
- **Marketing expenses** – These costs should stay relatively flat for the foreseeable future. AJX attends trade shows, updates marketing materials and relies on some third party marketing services for targeted marketing or email distribution.

## Balance sheet and cash flow

**Figure 12: Balance sheet – Moelis estimates**

A\$m	2015	2016	2017	2018	2019	2020
Cash	11.6	12.8	14.0	20.3	23.7	27.1
Receivables	0.1	0.8	2.9	4.3	5.8	7.5
Other Current Assets	0.2	0.5	0.5	0.5	0.5	0.5
PP&E	0.4	0.5	0.6	0.7	0.7	0.7
Other Non-Current Assets	0.3	0.2	0.6	1.2	2.0	3.0
<b>Total Assets</b>	<b>12.6</b>	<b>14.8</b>	<b>18.7</b>	<b>26.9</b>	<b>32.7</b>	<b>38.8</b>
Payables	0.6	3.1	11.7	17.1	23.4	30.0
Other Current Liabilities	0.2	0.2	0.3	0.4	0.5	0.7
Long term borrowings	0.0	5.2	4.3	1.8	1.8	1.8
<b>Total Liabilities</b>	<b>0.8</b>	<b>8.6</b>	<b>16.3</b>	<b>19.3</b>	<b>25.7</b>	<b>32.5</b>
Contributed Equity	41.4	45.4	45.4	45.4	45.4	45.4
Reserves	4.4	7.1	1.7	2.9	(5.5)	(17.8)
Retained Earnings	(34.0)	(46.2)	(44.6)	(40.5)	(32.6)	(20.8)
<b>Total Shareholder Equity</b>	<b>11.8</b>	<b>6.3</b>	<b>2.5</b>	<b>7.8</b>	<b>7.3</b>	<b>6.8</b>

Source: Company reports and Moelis estimates

Currently, AJX carries no debt. We estimate that this will increase in FY16 as commercialisation ramps up and working capital needs grow.

**Figure 13: Cash flow statement – Moelis estimates**

A\$m	2015	2016	2017	2018	2019	2020
Operating cash flow	(4.3)	(10.6)	8.4	8.6	13.3	17.7
Capex	(0.1)	(0.2)	(0.8)	(1.1)	(1.5)	(2.0)
<b>Free cash flow</b>	<b>(4.4)</b>	<b>(10.8)</b>	<b>7.6</b>	<b>7.5</b>	<b>11.8</b>	<b>15.7</b>

Source: Company reports and Moelis estimates

## Valuation

*We issue a **BUY** rating and a 12 month target price of **\$1.20**, which is an estimated 80.5% total return.*

### 12 month target price of \$1.20, representing 80.5% total return

We issue a BUY rating and a 12 month target price of \$1.20, an estimated 80.5% total return. Our 12 month target price is derived from the future value of our fundamental valuation, less dividends to be received between now and the target date. Our DCF based current valuation is shown in the table below. We use a WACC of 10.9%.

**Figure 14: Moelis valuation of AJX**

	A\$m	PER SHARE
Enterprise value	296.7	1.04
(Net debt) / Cash	11.6	0.04
Equity valuation	308.3	1.08

Source: Moelis estimates

## Trading multiples

Given AJX is the only provider of environmentally friendly and safe flame retardant treatments, and is still at the pre-earnings stage, comparing it to established players is of limited value.

## Appendix I - SWOT Analysis

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>▪ Range of Alexiflam products are unique in the market place.</li> <li>▪ AJX's IP is protected by global 20 year patents.</li> <li>▪ AJX's partnership system with toll manufacturers, finishers and sales agents provide global scale and create barriers to entry.</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>▪ The partnerships potentially diminish AJX's control.</li> <li>▪ AJX may become capital constrained as it ramps up production.</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>▪ Regulation.</li> <li>▪ New markets.</li> <li>▪ We see upside risk to our estimates.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>▪ Expansion overseas (especially Asia) may pose risks for AJX's IP.</li> </ul>

### Strengths

#### The range of Alexiflam products are unique in the market place

- The Alexiflam range differentiates itself from the rest of the market in terms of being:
  1. Environmentally friendly and non-toxic - passes strict new environmental regulation;
  2. Cost effective; and
  3. Performance advantage - the formulation improves, or limits damage to the original product's characteristics. It can also be laundered.
- No other player has environmentally friendly flame retardant chemistry with minimal impact to other properties while meeting the customer needs. Most competitors are still producing brominated or halogenated products and at a higher price point to customers as more chemicals need to be used to achieve the same result.
- The cost advantage of AJX's proposal to customers is threefold. Firstly, less volume of AJX's formulations is needed to make surfaces flame retardant compared to traditional flame retardant treatments. Secondly, because AJX's formulations can be applied to a number of different surfaces, a customer could use a cheaper material for the product and still be able to treat it. Finally, AJX's treatments are longer lasting than traditional treatments, thereby reducing the replacement cycle.

#### AJX's IP is protected by global 20 year patents

- AJX has an extensive IP portfolio with over 20 patents in 9 countries and 3 patent applications are pending.
- Those 3 applications specifically relate to flame retardant chemical treatments and emulsions and overlap with the existing patent library.
- AJX is of the view that safe flame retardant chemicals would be very difficult to replicate without a company infringing on one or more of its patents.
- The current patents are for ~20 years, no current patent has <16 years to expiry and they cover all markets AJX currently operates and seeks to enter.

AJX's partnership system with toll manufacturers, finishers and sales agents provide global scale and create barriers to entry

- AJX has established strategic partnerships in order to rapidly scale its go-to-market capabilities using an asset light operating model.
- Given the size and scale of the global chemical markets, AJX partners with a number of sales agents to initiate trials with potential customers.
- The customer interacts directly with AJX during the sales cycle and once a suitable chemical formulation is finalised, AJX partners with toll manufacturers to make that formulation in the quantity the customer requires.
- The mixed chemistry is then sent to a commission finisher that applies it to the customer's fabric and the final treated product is then sent to the customer.
- It is important to note that as soon as the "know-how" i.e. the formulation and how to apply it to the product is sold to the customer, AJX transfers the liability.
- This structure creates a huge advantage for AJX over other major players. Competitors cannot handle the wide range of supply chain variations AJX can by partnering with these companies. It also makes AJX far more flexible if a change to a customer's supply chain arises.

## Weaknesses

Partnerships potentially diminishes AJX's control of its IP

- A potential weakness with AJX's partnership system is that it loses control of its formulation once the chemicals are delivered to the toll manufacturer.
- Having said this, as soon as the "know-how" i.e. the formulation and how to apply it to the product is sold to the customer, AJX transfers the liability. For instance, if the toll manufacturer and/or the finisher make a mistake in the mixing or application and as a result the product is not flame retardant, the customer should not be able to sue AJX.

As AJX ramps up its production, its working capital needs will grow

- Currently, AJX carries no debt. We estimate that this will increase as commercialisation ramps up and working capital needs grow.

## Opportunities

Regulation

- In our opinion, regulatory changes will be a driving factor in AJX's market share gain in the near term. This is driven by an increase in understanding about the harmful side effects of brominated or halogenated products and customers limiting liability exposure in the future. This has led to several countries/regions banning toxic chemicals, most notably the EU and Washington DC.
- At the same time, stringent fire safety regulations are causing companies to look for more effective performance in flame retardant treatments.

#### New markets

- We believe AJX will enter new markets as its chemical formulas can relatively easily be applied to other surfaces and other countries.
- For instance, not included in our estimates or management's CY16 revenue forecast of ~US\$18.5m is any contribution from its latest customer win in the floor covering sector. This market is expected to grow by ~5% p.a. to 2019.

#### We see upside risk to our estimates

- We view our revenue growth rates for the different end-user industries as conservative. We note that AJX's sales pipeline (trial customers) is ~10x the size of its list of "won" clients. As regulation continues to push the flame retardant market towards solutions like AJX's, the company should continue to convert those trial customers into sales and pursue new sales opportunities.
- Similarly, we have taken the conservative approach on gross profit margins, sticking to the lower end of management's guidance. This is primarily to allow for some margin erosion in order to win new customers.

### **Threats**

#### Expansion overseas (especially into Asia) may pose risks for AJX's IP

- AJX has plans to expand into new geographic markets including parts of Asia.
- Expanding into China may be risky in terms of protecting AJX's IP. Having said this, management have said that they are targeting specific opportunities that are "customer pull" rather than "product led". They have yet to experience a patent infringement.

## Appendix II - Board of directors & management

### **Gavin Rezos - Executive Chairman**

Gavin Rezos has extensive Australian and international investment banking experience and is a former Investment Banking Director of the HSBC Group with regional roles during his HSBC career based in London, Sydney and Dubai. Mr Rezos has held chief executive positions and executive directorships of companies in the technology, energy and resources areas in the UK, US and Singapore and was formerly a director of Amity Oil NL (Antares). He is an independent non-executive Director of Iluka, non-executive Director of Department 13 International Limited, and co-principal of Viaticus Capital LLC.

### **Nicholas Clark - CEO and Executive Director**

Nick Clark currently serves as CEO of Alexium International. He also serves as the Executive Director and sits on the Audit Committee. Mr Clark has extensive experience in executive management, mergers and acquisitions globally and has held roles such as Deputy Head, Mergers and Acquisitions, Head of Foreign Investments and Head of Commercial and Contract Services, in particular with CITIC, one of China's largest resource groups. He is also co-principal of Viaticus Capital LLC.

Mr Clark is responsible for the overall strategic development and ongoing growth of AJX. He is a Law and Economics graduate with a postgraduate MBA and has attended Columbia University as well as Yale CEO College.

### **Craig Smith-Gander - Non-Executive Director**

Craig Smith-Gander is an accomplished businessman and entrepreneur with extensive executive experience including risk manager of Clough Engineering Group, President of Surf Life Saving in WA, Chairman of Sustainability and owner of Kwik Transport and Crane Hire. He has extensive investment banking and corporate finance experience and is a former Director, Investment Banking at CIBC World Markets. He is a graduate of the Royal Military College, Duntroon. He currently serves as Chairman of the Remunerational Committee.

### **Craig Metz - Non-Executive Director**

Craig Metz has over 20 years of experience in legislative and regulatory affairs. He served as Chief of Staff to the late Congressman Spence (R-SC) and held staff position in the US Senate and House of Representatives. Metz serves as Chairman of the Audit Committee.

### **Brigadier General Stephen Cheney - Non-Executive Director**

General Stephen Cheney was a decorated Marine and is the former Inspector General of the Marine Corps and Commanding General of Parris Island Marine Base. He is also the former Deputy Executive Secretary to US Defense Secretary Dick Cheney and currently sits on the Secretary of State John Kerry's Foreign Affairs Policy Board. General Cheney sits on AJX's Remuneration Committee.

### **Dirk Van Hyning - President**

Dr Dirk Van Hyning is responsible for AJX's Operations, leadership management and direction of the business amongst all departments. Prior to joining AJX, Dirk had various engineering and project management roles at Milliken & Company. He holds a BS, MS and PhD and attended NC State and the University of Illinois.

**Michael Schwartz – General Manager of Operations & Growth**

Michael Schwartz is responsible for AJX's Operations encompassing: logistics, quality assurance, manufacturing coordination, purchasing and supply chain. Michael comes to AJX with nearly 17 years of coatings and textile chemical industry experience.

**Aaron Krech - CFO**

Aaron Krech is responsible for the financial leadership and fiscal management of the company. Prior to AJX he had previous experience in corporate treasury analysis and risk management at Blue Cross and Blue Shield. He received an Accounting and Finance Business degree from the Darla Moore School of business at the University of South Carolina (USC), and is currently attending USC for a MBA in International Business.

**Dr Robert (Bob) Brookins – VP of R&D**

Dr Robert Brookins is responsible for the research and development of new and existing chemistry while managing the leadership and development of the R&D team. Dr Brookins has a PhD in Chemistry and attended University of Florida, specializing in organic synthesis and characterization of conjugated polyelectrolytes and polymers.

**Steve Gravlee – VP of Sales**

Steve Gravlee is responsible for the leadership management and direction of the AJX sales team both in the US and Europe. He has over 35 years' experience in the textiles and flame retardant furnishings arena. Mr Gravlee received his BA in Economics from Wofford College and his MBA from Wake Forest University.

**Alexium Intl Group (AJX)** Market Cap: \$190m Last Price: \$0.67 Target Price: \$1.20 **BUY**

Key Stock Data					Profit and Loss (\$m)				
Year Ending Jun	2015a	2016e	2017e	2018e	Year Ending Jun	2015a	2016e	2017e	2018e
<b>EPS (Underlying) (€)</b>	<b>(3.0)</b>	<b>(4.5)</b>	<b>0.6</b>	<b>1.4</b>	<b>Revenue</b>	<b>0.1</b>	<b>6.6</b>	<b>41.7</b>	<b>55.1</b>
<i>Growth</i>	57%	51%	-113%	144%	<i>Growth</i>	-76%	11132%	527%	32%
<b>DPS (€)</b>	-	-	-	-	<b>EBITDA</b>	<b>(6.4)</b>	<b>(12.1)</b>	<b>2.5</b>	<b>6.0</b>
<i>Growth</i>	0%	0%	0%	0%	<i>Growth</i>	133%	91%	-121%	137%
Yield (%)	0%	0%	0%	0%	Dep'n & Amort	(0.1)	(0.2)	(0.3)	(0.5)
Payout Ratio (%)	0%	0%	0%	0%	<b>EBIT</b>	<b>(6.5)</b>	<b>(12.3)</b>	<b>2.2</b>	<b>5.5</b>
Franking (%)	0%	0%	0%	0%	<i>Growth</i>	129%	90%	-118%	148%
<b>P/E (x)</b>	<b>-22.4 x</b>	<b>-14.9 x</b>	<b>nm</b>	<b>nm</b>	Net Interest Expense	(0.4)	0.1	0.1	0.3
P/E Small Ind. (ex Fin's)	16.8 x	14.7 x	13.3 x	12.6 x	<b>Profit Before Tax</b>	<b>(6.9)</b>	<b>(12.3)</b>	<b>2.4</b>	<b>5.8</b>
Premium (Discount)	-234%	-201%			Tax	0.0	0.0	(0.7)	(1.7)
<b>EV/EBITDA (x)</b>	<b>-28.1 x</b>	<b>-14.7 x</b>	<b>nm</b>	<b>nm</b>	Tax Rate (%)	0%	0%	30%	30%
EV/EBITDA Small Ind.		10.5 x	9.2 x	8.6 x	Minorities	0.0	0.0	0.0	0.0
Premium (Discount)		-240%			<b>NPAT (Underlying)</b>	<b>(6.9)</b>	<b>(12.3)</b>	<b>1.7</b>	<b>4.1</b>
<b>FCF/Share (\$)</b>	<b>(0.02)</b>	<b>(0.04)</b>	<b>0.03</b>	<b>0.03</b>	<i>Growth</i>	107%	79%	-114%	144%
Price/FCPS (x)	-35.1 x	-16.9 x	25.1 x	25.5 x	One-Off Items	(4.9)	0.0	0.0	0.0
Free Cash Flow Yield (%)	-3%	-6%	4%	4%	<b>NPAT (Reported)</b>	<b>(11.8)</b>	<b>(12.3)</b>	<b>1.7</b>	<b>4.1</b>
					<b>EPS (Underlying) (€)</b>	<b>(3.0)</b>	<b>(4.5)</b>	<b>0.6</b>	<b>1.4</b>
					<i>Growth</i>	57%	51%	-113%	144%
					<b>EPS (Reported) (€)</b>	<b>(5.1)</b>	<b>(4.5)</b>	<b>0.6</b>	<b>1.4</b>

Balance Sheet (\$m)					Cashflow (\$m)				
Year Ending Jun	2015a	2016e	2017e	2018e	Year Ending Jun	2015a	2016e	2017e	2018e
Cash	11.6	12.8	14.0	20.3	<b>EBIT</b>	<b>(6.5)</b>	<b>(12.3)</b>	<b>2.2</b>	<b>5.5</b>
Inventory	0.0	0.0	0.0	0.0	Dep'n & Amort	0.1	0.2	0.3	0.5
Current Receivables	0.1	0.8	2.9	4.3	Net Interest	(0.1)	0.1	0.1	0.3
PPE	0.4	0.5	0.6	0.7	Tax	(0.0)	0.0	(0.7)	(1.7)
Intangibles	0.2	0.2	0.6	1.2	Change in WC	(6.5)	1.8	6.4	4.0
Other	0.3	0.5	0.5	0.5	Other	8.7	(0.3)	0.0	0.0
<b>Total Assets</b>	<b>12.6</b>	<b>14.9</b>	<b>18.7</b>	<b>26.9</b>	<b>Operating Cash Flow</b>	<b>(4.3)</b>	<b>(10.6)</b>	<b>8.4</b>	<b>8.6</b>
Current Payables	0.6	3.1	11.7	17.1	<i>Growth</i>	39%	147%	-180%	2%
ST Debt	0.0	0.0	0.0	0.0	Capex	(0.1)	(0.2)	(0.8)	(1.1)
LT Debt	0.0	5.2	4.3	1.8	Acquisitions	0.0	0.0	0.0	0.0
Provisions	0.1	0.1	0.1	0.1	Divestments	0.0	0.0	0.0	0.0
Other	0.1	5.4	4.4	2.0	Other	(0.0)	0.0	0.0	0.0
<b>Total Liabilities</b>	<b>0.8</b>	<b>8.6</b>	<b>16.2</b>	<b>19.1</b>	<b>Investing Cash Flow</b>	<b>(0.1)</b>	<b>(0.2)</b>	<b>(0.8)</b>	<b>(1.1)</b>
<b>Net Assets</b>	<b>11.8</b>	<b>6.3</b>	<b>2.5</b>	<b>7.8</b>	Equity Raised	11.9	3.5	0.0	0.0
Equity & Reserves	45.8	52.5	47.1	48.3	Dividends Paid	0.0	0.0	0.0	0.0
Retained Profits	(34.0)	(46.2)	(44.6)	(40.5)	Net Borrowings	(0.8)	7.3	(7.6)	(7.5)
<b>Shareholders Equity</b>	<b>11.8</b>	<b>6.3</b>	<b>2.5</b>	<b>7.8</b>	Other	0.0	0.0	0.0	0.0
Minorities	0.0	0.0	0.0	0.0	<b>Financing Cash Flow</b>	<b>11.1</b>	<b>10.8</b>	<b>(7.6)</b>	<b>(7.5)</b>
<b>Total Equity</b>	<b>11.8</b>	<b>6.3</b>	<b>2.5</b>	<b>7.8</b>	FX / Non Cash Items	0.7	1.2	1.2	1.2
<b>Metrics</b>					<b>Change in Cash</b>	<b>6.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Working Capital	(0.5)	(2.0)	(8.5)	(12.5)	<b>Metrics</b>				
Working Capital/Sales (%)	-882%	-31%	-20%	-23%	FCF	(4.4)	(10.8)	7.6	7.5
NTA	11.6	6.1	1.9	6.6	Gross Cash Conversion	65%	88%	354%	167%
NTA/Share (\$)	0.04	0.02	0.01	0.02	Capex/Sales (%)	199%	3%	2%	2%
					Capex/Depreciation (x)	0.9 x	1.1 x	2.7 x	2.3 x

1H/2H Results (\$m)					Margins, Leverage & Returns				
Item	1H14	2H14	1H15	2H15	Year Ending Jun	2015a	2016e	2017e	2018e
Revenue	0.2	0.0	0.0	0.0	<b>Margins (%)</b>				
EBITDA	(1.4)	(1.3)	(2.4)	(3.9)	EBITDA	-10744%	-183%	6%	11%
EBIT	(1.8)	(1.1)	(2.5)	(4.0)	EBIT	-10971%	-186%	5%	10%
NPAT (Underlying)	(1.8)	(3.0)	(2.6)	(4.3)	NPAT	-11595%	-184%	4%	7%
EPS (€)	nm	(11.5)	(1.2)	(1.7)	<b>Leverage</b>				
DPS (€)	0.0	0.0	0.0	0.0	Net Debt (Cash) (\$m)	(11.6)	(7.6)	(9.7)	(18.4)
Operating Cash Flow	(1.4)	(1.7)	(1.8)	(2.4)	Net Debt/EBITDA (x)	1.8 x	0.6 x	-3.8 x	-3.1 x
Capex	(0.0)	(0.1)	(0.0)	(0.1)	ND/(ND + Equity) (%)	-6274%	588%	135%	173%
FCF	(1.4)	(1.8)	(1.9)	(2.5)	Interest Cover (x)	-15.1x	-45.8x	2.6x	9.2x
<b>Skew (% Full Year)</b>					<b>Returns (%)</b>				
% Sales	84%	16%	28%	72%	ROA	-52%	-89%	10%	18%
% EBITDA	51%	49%	38%	62%	ROE	-65%	-135%	38%	79%
% NPAT	55%	91%	38%	62%	ROIC	-188%	2234%	-37%	-43%

Source: Company data, IRESS, Moelis & Company research estimates

## RESEARCH &amp; SALES RESPONSIBILITIES

## Equities

John Garrett	Head of Distribution	+612 8288 5409
Simon Scott	Head of Research	+612 8288 5418
Elliot Leahey	Operations Manager	+612 8288 5402
Sarah Sagvand	Desk Assistant	+612 8288 5401

## US Distribution Partner - Weeden &amp; Co.

Matthew McCloghry	+1 646 227 5575
<i>mmccloghry@weedenco.com</i>	

## Equities Sales &amp; Trading

Angus Murnaghan	+612 8288 5411
Ian McKenzie	+612 8288 5404
Andrew Harvey	+612 8288 5428
Mitchell Hewson	+612 8288 5417
Bryan Johnson	+612 8288 5412
<i>Real Estate Specialist</i>	
Aaron Payne	+612 8288 5405
<i>Hedge Fund &amp; Real Estate Advisory</i>	
John Garrett	+612 8288 5409

## Equities Research

<i>Real Estate</i>	
Simon Scott	+612 8288 5418
Hamish Perks	+612 8288 5419
Edward Day	+612 8288 5424
<i>Industrials</i>	
Garry Sherriff	+612 8288 5421
Olivia Bible	+612 8288 5408
Kyle Twomey	+612 8288 5423
Benjamin Atkinson	+612 8288 5422

*email: firstname.lastname@moelis.com*

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