



## Polar Sapphire HPA Shipments

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ASX Code: PUA, PUAOC

# Polar Sapphire ships commercial quantities of 99.999% HPA

Highly successful production run demonstrates ability to produce large quantities of top-quality HPA using Polar Sapphire's patented process

### Key Points

- Polar Sapphire has been operating its pilot plant at full capacity to deliver almost 10 tonnes of 99.999% (5N) high purity alumina (HPA) in the last 2 weeks, proving its proprietary technology.
- These HPA deliveries fulfill orders received from both new customers and larger orders from existing customers demonstrating increasing demand for Polar's HPA
- Polar is ready to expand HPA production capacity to meet growing HPA demand

Pure Alumina Limited (ASX: PUA) is pleased to announce the continued growth in sales of Polar Sapphire 5N HPA. Pure Alumina is currently acquiring Canadian HPA producer Polar Sapphire.



First shipment in 2014

Polar Sapphire has had an active sales and marketing development program since 2014 when its first HPA first samples were sent to prospective customers. The quality of Polar Sapphire's HPA produced at its Toronto pilot plant together with its attention to customer service has resulted in growing commercial sales of its 5N HPA.





Part of the latest HPA shipments

The current shipments of nearly 10 tonnes are going to several sapphire producers. It is encouraging that orders for Polar HPA are increasing in quantity to current customers and attracting new customers.

To date, sales have been targeted toward the synthetic sapphire market, which benefits from the high quality 99.999% HPA that Polar Sapphire produces. In addition to the sapphire market, marketing and R&D is advancing on customising HPA products for the rapidly expanding HPA coated lithium battery separator market.

Polar Sapphire's Toronto HPA pilot plant is approaching its capacity and to satisfy demand for its HPA, Polar needs to expand. Pure Alumina's proposed acquisition of Polar Sapphire and capital raise would enable Pure Alumina to increase Polar Sapphire's production facility to 1,000 tonnes per annum of HPA within 12 months. With HPA demand forecast to grow rapidly, we anticipate further expanding HPA capacity quickly to an initial HPA target of 5,000 tpa within 3 years.

Martin McFarlane, Pure Alumina's Managing Director said, "The attractive market fundamentals of HPA has caught the attention of a number of companies. Only Pure Alumina, through its proposed acquisition of Polar Sapphire, has access to a HPA pilot plant making commercial HPA sales today and low cost expansion plans that could be delivered within a year."

Martin McFarlane  
Managing Director

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## **Pure Alumina Limited**

Pure Alumina is an ASX listed company with a strategy to become a producer of high purity alumina to capture the opportunity presented by the rapidly growing high purity alumina market.

Pure Alumina has completed a pre-feasibility study of its 100% owned Yendon kaolin to HPA project which demonstrated robust technical and financial outcomes. Investor feedback raised concerns on the capital required and timeframe for the Yendon project. The proposed acquisition of Polar Sapphire addresses investor concerns with a 90% reduction in total capital to acquire Polar Sapphire and initiate commercial production of HPA. Commercial HPA production is planned to commence within a year.

The completion of the acquisition of Polar Sapphire is expected to enable Pure Alumina to be the first ASX listed HPA producer. Polar's technology has been proven at pilot plant scale, has very low capital and operating costs and a fast construction time to commercial production of 12 months from the completion of the acquisition.

Once commercial HPA production is established, Pure Alumina plans to undertake R&D to integrate its kaolin process with Polar Sapphire's proprietary technology. If successful, it would further reduce Polar Sapphire's already low operating costs.

## **Polar Sapphire**

Polar Sapphire is a private venture capital funded cleantech company located in Ontario, Canada. Polar have developed a patented hydrochloric acid based process for making HPA using various feedstocks including aluminium metal. Polar currently manufacture and sell HPA powder, pellets and beads for various market segments. Polar's customers are reporting excellent quality results from our HPA.

Polar is managed by Scott Nichol who has more than 15 years experience successfully starting and building companies including 6N Silicon, Rand Corporation and Cymat Technologies that focus on high purity materials and metals for specialised high value end uses.