

# ASX / MEDIA ANNOUNCEMENT



17 October 2019

## Highest Purity Lithium Carbonate Produced

- Lithium carbonate grading 99.95% produced from recent L-Max<sup>®</sup> Pilot Plant trial, taking purity to the second decimal place
- Impurity levels for all deleterious elements for existing producer battery grade product were below required levels for most benchmark specifications
- A test-work programme has started to replicate similar levels of purity for production of lithium hydroxide using LOH-Max<sup>™</sup>
- Lithium hydroxide batch runs to start in October, with refining scheduled for November and assay results in December

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to advise that further results from the recent Pilot Plant campaign have been received, with the highest specification lithium carbonate produced to date by L-Max<sup>®</sup>, of 99.95% purity. This compares with a nominal battery grade reference purity of 99.5% for many existing producers. Importantly, impurity levels of most deleterious elements for battery grade specifications were below required levels and often below detection limits.

| Product                                 | Producer             |                     |      |              |           |        |
|---|----------------------|---------------------|------|--------------|-----------|--------|
|   | Lepidico Pilot Plant | Lepidico Mini-Plant | SQM  | Livent (FMC) | Albemarle | Tianqi |
| Li <sub>2</sub> CO <sub>3</sub> (% min) | 99.95                | 99.9                | 99.2 | 99.5         | 99.8      | 99.5   |
| <b>Impurity</b>                         |                      |                     |      |              |           |        |
| SO <sub>4</sub> (ppm)                   | 215                  | 134                 | 300  | 1000         | 500       | 800    |
| Na (ppm)                                | <10                  | 13                  | 600  | 500          | 650       | 250    |
| K (ppm)                                 | <10                  | 14                  | 50   | 10           | -         | 10     |
| CaCO <sub>3</sub> (ppm)                 | 159                  | 140                 | 250  | 1000         | 400       | 125    |
| Fe (ppm)                                | <10                  | 9                   | -    | 5            | -         | 20     |
| Moisture (%)                            | NA                   | NA                  | 0.20 | 0.50         | 0.35      | 0.40   |

Source: Roskill and company data (ref: Lepidico ASX Announcement 3 April 2017)

LEPIDICO LTD  
ABN 99 008 894 442

ASX: LPD

23 Belmont Avenue  
Belmont WA 6104

PO Box 330  
Belmont WA 6984

Phone: + 61 8 9363 7800  
Email: [info@lepidico.com](mailto:info@lepidico.com)

Suite 200, 55 University  
Avenue  
Toronto ON M5J 2H7,  
CANADA

Calcium reduced significantly from the levels recorded in the previous batch test announced on 16 September 2019, following identification of the source of contamination. Further improvements in lithium chemical purity are expected to be achievable. However, production of an equivalent high purity lithium hydroxide sample, using the proprietary LOH-Max™ process technology is now the priority.

A LOH-Max™ circuit is under construction and key consumables have been sourced. Batch production of crude lithium hydroxide is scheduled for later in October, which should allow refining to a high purity product during November, with assays expected in December. Lepidico has allocated considerable time to the refining process as lithium hydroxide readily reacts with carbon dioxide from the air, necessitating product refining to be undertaken in a carbon dioxide depleted environment.

#### **Further Information**

For further information, please contact

**Joe Walsh**  
**Managing Director**  
**Lepidico Ltd**  
Tel: +1 647 272 5347

**Tom Dukovcic**  
**Director Geology**  
**Lepidico Ltd**  
Tel: +61(08) 9363 7800

Email: [info@lepidico.com](mailto:info@lepidico.com)  
Website: [www.lepidico.com](http://www.lepidico.com)

#### **About Lepidico Ltd**

Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium chemicals. Lepidico owns the technology to a metallurgical process that has successfully produced lithium carbonate from non-conventional sources, specifically lithium-rich mica minerals including lepidolite and zinnwaldite. The L-Max® Process has the potential to complement the lithium market by adding low-cost lithium carbonate supply from alternative sources. More recently Lepidico has added LOH-Max™ to its technology base, which produces lithium hydroxide from lithium sulphate without by-product sodium sulphate. The Company is currently conducting a Feasibility Study for a 5,000 tonne per annum (LCE) capacity Phase 1 lithium chemical plant, targeting commissioning in late 2021. Work is currently being undertaken to incorporate LOH-Max™ into the Phase 1 Plant Project engineering. Feed to the Phase 1 Plant is planned to be sourced from the Karibib Lithium Project in Namibia, 80% owned by Lepidico, where a Mineral Resource of 8.8 Mt grading 0.56% Li<sub>2</sub>O and 59ppm Ta<sub>2</sub>O<sub>5</sub> is estimated (ASX announcement of 16 July 2019) and/or the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Grupo Mota (ASX announcement of 7 December 2017).

#### **Forward-looking Statements**

All statements other than statements of historical fact included in this release including, without limitation, statements regarding future plans and objectives of Lepidico, are forward-looking statements. Forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Lepidico that could cause Lepidico's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this release will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. Lepidico does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this release, except where required by applicable law and stock exchange listing requirements.

For personal use only