

Australian Securities Exchange

Complaint against Antaria Limited (ANO)



August 28, 2012

Who is making the Complaint?

Organisation: Friends of the Earth Australia Inc.

Address: PO Box 222, Fitzroy VIC 3065

Contact Person for the Complainant:

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Who is the complaint against?

Antaria Limited ("Antaria")

Address: 3 Brodie Hall Drive, WA 6102

ASX Code: ANO

ABN: 54 079 845 855

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www.antaria.com

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Chairman: Rade Dudurovic 0438 333 888

Description of conduct for which complaint is being made

The basis of the complaint is that Antaria Ltd (ASX: ANO) has misrepresented to the market the nature of its principal product (ZinClear IM) which it manufactures and supplies to third parties in Australia and overseas for use in sunscreen applications, and has not disclosed important price sensitive information to the ASX in a timely manner.

The product is a chemical substance known as zinc oxide which Antaria markets under the name "ZinClear IM". Antaria has for some time been representing that ZinClear IM is what is described as a "Non-Nano" product and "not a nanomaterial". The Complainant says that ZinClear IM is comprised of aggregates of nanoparticles, with intentionally manufactured nano-surface structures. In these circumstances, we consider it is false and misleading for Antaria to represent that ZinClear IM as 'non-nano'.

This non-disclosure has a potential material affect on the price of Antaria securities as:

- (1) Since 2009, ZinClear IM has accounted for the majority of Antaria's product sales and income. Sales of ZinClear IM represent 82% of Antaria's sales revenue. [*reference: Antaria Limited – REPORT FOR FOURTH QUARTER FY12*];
- (2) the Australian sunscreen market, to which ZinClear IM is directed, is sensitive to whether sunscreens include nanomaterials;
- (3) given, as independent measurements confirm (see below), Antaria's ZinClear IM is a nanomaterial, sales of ZinClear IM are likely to be impacted, with consequential affects on Antaria's financial position.

Antaria has repeatedly failed to disclose material price-sensitive information to the ASX concerning ZinClear IM product

Listing Rule 3.1 states:

"Timely disclosure must be made of information which may affect security values or influence investment decisions, and information in which security holders, investors and ASX have a legitimate interest"

The complainant says that by continuing to represent ZinClear IM as "non-nano" to investors, shareholders and the Australian stockmarket, in spite of evidence to the contrary, Antaria has violated Listing Rule 3.1, and as such, is in violation of the *Corporations Act (2001)*.

1. Antaria failure to disclose – from October 2010

Friends of the Earth asserts that Antaria has failed to disclose to the market, that its flagship product was a nanomaterial, as defined since at least October 2010, in all relevant Australian and international standards and guidelines.

That Antaria's ZinClear IM is a nanomaterial is confirmed by:

- (a) past statements by Antaria senior employees acknowledging the nano-structure of ZinClear IM (see Technical Background Information section), and

- (b) the fact that the relevant patent for the product relied on by Antaria (US 2010/0310871 A1) states clearly that the product is “meso-porous” (that is, possesses nano-scale pores) and is based on aggregates of primary nanoparticles.

It is clear from annual surveys of sunscreen manufacturers undertaken by Friends of the Earth, that many sunscreen brands were purchasing ZinClear IM on the basis of Antaria’s non-nano claims, in many cases to gain organic certification and/or market their products as “non-nano”, “nano-particle free” or “nano-free”.

In October 2010, the Australian Government National Industrial Chemicals Notification and Assessment Scheme (“NICNAS”) (Schedule 4) and the International Organisation for Standardisation (ISO/TS 80004-1:2010) (Schedule 5) both published formal definitions for nanomaterials. The Complainant says that according these definitions, the ZinClear IM technology is a nanomaterial: see Antaria’s internal evidence above and independent confirmation (point 2 below).

In spite of the publication of the ISO and NICNAS definitions in October 2010, Antaria have continued to promote ZinClear IM as “non-nano”.

As such, it is reasonable to assume that the failure of Antaria to withdraw its claims in the face of the formalization of the definitions of ‘nanomaterials’ which clearly include ZinClear IM, would be likely to have a material effect on the value of ANO securities. However, Antaria made no statement to the ASX to highlight this and has continued to market ZinClear IM as ‘non-nano’.

2. Antaria failure to disclose – October 2011

In March 2009, the European Parliament voted to create an EU-wide register of cosmetic products. This new directive (EU Regulation 1223/2009). puts into place rules governing nanotechnology, product claims, and substances deemed carcinogenic, mutagenic and toxic to reproduction. Coming into effect on July 11 2013, this new regulation will require manufacturers to:

- conduct safety testing for products containing nano-engineered materials. This could lead to a ban on a substance, should it be found to endanger human health.
- disclose the use of nanomaterials on the label of each cosmetic product (this includes all sunscreens).

In October 2011, the European Union recommended the nanomaterial definition (2011/696/EU; Schedule 6) for reference in determining whether a material should be considered a nanomaterial for legislative and policy purposes. According to the product’s patent (US 2010-0310871 A1; Schedule 2), ZinClear IM would clearly be categorized as a nanomaterial under this European definition.

The European cosmetics market is the largest in the world and is strategically important for Antaria who are working closely with several European distribution networks. We therefore believe it was unreasonable for Antaria to not disclose these important regulatory developments to the ASX.

3. Antaria failures to disclose – February and May, 2012

Research by the National Measurement Institute (NMI), an independent agency of the Australian Government, presented at the International Conference on Nanoscience and Nanotechnology (“ICONN”) conference in Perth on 6th February 2012 (Schedule 7), indicated that zinc oxide nanomaterials were detected in three sunscreen products known to contain ZinClear IM (Cancer Council Classic, Invisible Zinc Junior & Invisible Zinc Body).

Following this presentation, Gregory Crocetti of Friends of the Earth immediately arranged to meet Dr. John Robinson (General Manager Advanced Research and Development at Antaria) and the NMI researchers on February 7 to discuss the concerns raised about ZinClear IM™ the previous day. Notwithstanding this meeting and a further meeting on February 8, Dr. Robinson refused to accept that ZinClear IM™ was a nanomaterial, in spite of evidence to the contrary.

However, Dr. Robinson confirmed to Friends of the Earth Australia in writing (via email) on February 24 that the patent (US 2010/0310871 A1) is the basis for the ZinClear-IM range (Schedule 8). The patent itself makes clear that the patented invention is nanostructured.

On 21 May 2012, Friends of the Earth wrote to Antaria (Schedule 9), formally alerting Antaria to the ISO and NICNAS definitions - specifically to make clear the ZinClear IM patent should be classified as a nanomaterial and that Antaria’s marketing ZinClear IM as non-nano is misleading. This letter requested that Antaria take restorative actions, including announcing to the ASX that ZinClear IM™ is a nanomaterial. However, no such action was taken by Antaria.

4. Antaria failure to disclose – 6th July, 2012

Friends of the Earth wrote to Antaria on 6th July 2012 (Schedule 10) to present the report ‘*Opinion concerning “mesoporous zinc oxide powder” described in United States Patent US 2010/0310871 A1*’ prepared by the National Measurement Institute (Schedule 1).

This NMI report concludes:

It is the opinion of the National Measurement Institute (NMI) that the “mesoporous zinc oxide powder” described in Patent US 2010/0310871 A1 is a “nanomaterial” according to International Organisation for Standardisation (ISO) technical specifications and an “industrial nanomaterial” as defined in the Australian Government National Industrial Chemicals Notification and Assessment Scheme (“NICNAS”) document “Guidance on new chemical requirements for Notification of Industrial Nanomaterials.”

Given the authority and independence of this report, and the market implications for its ZinClear IM product, we fail to understand why Antaria did not immediately disclose this information to the ASX.

5. Antaria ASX Announcement – 25th July, 2012

Following media reports on July 24th and 25th, Antaria made the ASX Announcement ‘*Response to Allegations made by Friends of the Earth*’ on July 25th (Schedule 12), referring to a letter to Friends of the Earth dated July 11, 2012 (Schedule 11).

In this ASX announcement Antaria states:

“These allegations centre on whether ZinClear IM™ is safe for use in sunscreens and whether Antaria misled the public in this respect”.

Antaria’s ASX statement fundamentally misrepresents the key nature of Friends of the Earth’s allegations, which were that Antaria were engaging in misleading and deceptive conduct by misrepresenting the nature of their product.

Friends of the Earth reject all assertions made in the July 11 letter from Antaria. Our detailed response (dated August 3rd, 2012) is attached to this complaint (Schedule 13).

6. Antaria failure to disclose – 6th August 2012

On 6th August, ECOCERT, one of the world’s largest certifiers of organic and natural cosmetics, suspended its certification of ZinClear IM after Antaria failed to provide evidence that it wasn’t a nanomaterial. An email from ECOCERT confirming this is attached to this complaint (Schedule 14). ECOCERT had given Antaria until the end of the previous week to respond to Friends of the Earth’s evidence that the company has been marketing nano-sunscreen ingredients as ‘non-nano’. Antaria has been marketing this product globally on the basis of its ECOCERT certification. It is therefore of concern to us that Antaria has failed to notify the ASX of this market sensitive information.

Technical Background Information

1. The Definition of ‘nanomaterial’

The complainant relies on the National Measurement Institute report of 28 June 2012, in support of its contention that ZinClear-IM is a nano-material.

Additionally the Complainant is aware of further definitions of nano-material in other jurisdictions. Two examples are:

a) *US National Nanotechnology Initiative:*

“Nanomaterials are all nanoscale materials or materials that contain nanoscale structures internally or on their surfaces. These can include engineered nano-objects, such as nanoparticles, nanotubes, and nanoplates.”

b) *European Union:*

“A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where...one or more external dimensions is in the size range 1 nm - 100 nm.” [specifies that 50% or more of the number of particles in a sample must be as described]

2. Claims from Antaria in relation to the ZinClear-IM product

Antaria’s patents describe ZinClear-IM as possessing characteristics that would result in it being categorised as a ‘nanomaterial’:

The ZinClear IM™ US patent 2010/0310871A1 (Schedule 2) states:

- It is intentionally manufactured to have novel properties (transparency) that are related to its nanoscale surface structure
- It is an aggregate (minimum size of approximately 0.8 µm – 1 µm, ie 800-1,000 nm; see clauses 0012-0021) composed of primary zinc oxide crystallites that are nanoscale (on average about 5-50 nm; see clause 0054)
- The aggregates of primary zinc oxide nano-crystallites are nano-structured; that is, the aggregates are intentionally manufactured to be mesoporous (clause 0024, the surface of the aggregates have nanoscale pores (2-100 nm in size; see clause 0048s and 0055)

Dr. John Robinson (General Manager Advanced Research and Development at Antaria) has confirmed to Friends of the Earth Australia in writing via email that the patent (US 2010/0310871A1) is the basis for the ZinClear-IM range (Schedule 8).

Antaria and its representatives have made public statements that acknowledge ZinClear-IM is nano-structured

- a) Advanced Nanotechnology Limited [the previous name of Antaria] open briefing to ASX 4 October 2006, p4

Available at: http://www.antaria.com/news/ano_open_briefing_041006.pdf

[Then] CEO Dr Paul McCormick states: “Our new Index Match technology makes larger particles, greater than one micron, transparent. This is achieved through a clever design of the particles whereby they are nanostructured but have a much larger size.”

b) Advanced Nanotechnology Limited Financial Report 2007, p8

Available at: <http://www.aspectfinancial.com.au/asxdata/20070921/pdf/00761750.pdf>

“ZinClear IM™, stable dispersions of transparent micron-sized nanostructured zinc oxide powders”

c) Antaria Limited Annual Report 2011, p6

Available at: http://www.antaria.com/news/ANOFY11_Annual_Report_30Sep11.pdf

“Antaria’s technology base allows the delivery of a micron sized zinc oxide particle which retains superior transparency due to the mesoporous [presence of nanoscale pores] nature of the particle, providing a competitive advantage over other mineral UV absorbers.”

Yet Antaria has made conflicting statements to potential investors that claim or imply that ZinClear-IM is not a nanomaterial

a) Antaria Limited presentation to BRR media “Understanding Antaria’s flagship product: ZinClear-IM”, 2 Feb 2011

Available at: <http://www.brrmedia.com/event/72868/antaria-ltd-understanding-antarias-flagship-product-zinclear-im-dr-deborah-cooper-managing-director>

P3 “Micron sized (non-nano)”

P14 contrasts ZinClear IM™ with competitors’ nano zinc oxide and titanium dioxide which are “caught in nano debate”. Promotes ECOCERT certification in Europe [ECOCERT is an internationally-recognised organic certifier with a principle of not certifying products that contain nanoparticles]

P16 “micron sized particle (non-nano)”

b) Antaria Limited presentation to ASX “Antaria Limited Platform for Profitability”, 24 August 2011

Available at: <http://www.asx.com.au/asxpdf/20110824/pdf/420l9r4frj7hpy.pdf>

P2 “transition from nano to micron size particle”

P8 “micron sized (non-nanoparticulate)”

18 contrasts Antaria’s nano zinc oxide product which has “nano concerns in some markets” with ZinClear IM which is “micron sized”

History of nano-sunscreens and ZinClear IM™

1. Antaria developed the ZinClear IM™ technology in about May 2006. Antaria described it as an “Index Matched™ zinc oxide dispersion that achieves superior transparency in larger micron sized zinc oxide particles”. Since 2007, Antaria has represented to its customers, investors, regulators and the public that ZinClear-IM is not a nanomaterial. Antaria’s corporate filings with the ASX and the material published by it have all conveyed the non-nano representation.

The relevant patent describing the ZinClear IM™ technology (US 2010/0310871 A1) was registered in the USA in December 2010 (Schedule 2).

2. As the Complainant understands, in the years prior to the development of ZinClear IM™ (that is - prior to 2006) Antaria had produced a zinc oxide ingredient which was in the nano-range for use in sunscreens. It was able to do this as it had access to then emergent nano-technology and because zinc-oxide formulations in the nano range had desirable attributes in terms of transparency, spreadability and the like. The complainant understands this product was marketed to sunscreen suppliers as a nano-product.
3. In those early years concerns began to emerge in scientific studies and elsewhere about the safety and desirability of the use of nano-particles in sunscreens.
4. It was at about this time that Antaria ceased to market its nano zinc oxide product and replaced it with the ZinClear IM™ product.
5. In September 2006, the Australian Government regulator National Industrial Chemicals Notification and Assessment Scheme (“NICNAS”) published an Information Sheet on Nanomaterials which explained
“a nanomaterial is a material having at least one dimension 100 nanometres or less, can be nano-scale in one dimension (eg. surface films), two dimensions (eg. strands or fibres), or three dimensions (eg. particles) – and can exist in single, fused, aggregated or agglomerated forms...”(Schedule 3)
6. Subsequently, in October 2010, NICNAS (Schedule 4) and the International Organisation for Standardisation (ISO/TS 80004-1:2010) both launched formal definitions for nanomaterials (Schedule 5). The Complainant says that according these definitions, the ZinClear IM™ technology is a nanomaterial.
7. In 2012, the Complainant sought an opinion from Australian Government body - National Measurement Institute (NMI) - as to the ZinClear IM™ particles as described in Antaria’s US Patent 2010/031087AI (“the Patent”). The conclusion to the June 28 report (Schedule 1) at paragraph 6 States:

It is the opinion of the National Measurement Institute (NMI) that the “mesoporous zinc oxide powder” described in Patent US 2010/0310871 A1 is a “nanomaterial” according to International Organisation for Standardisation (ISO) technical specifications and an “industrial nanomaterial” as defined in the Australian Government National Industrial Chemicals Notification and Assessment Scheme (“NICNAS”) document “Guidance on new chemical requirements for Notification of Industrial Nanomaterials.”

Schedule

Evidence supporting the claim that ZinClear IM is a nanomaterial

1. Report from the National Measurement Institute, 28th June, 2012
2. Antaria Patent US 2010-0310871 A1, filed 9th Dec, 2010
3. NICNAS Information Sheet on Nanomaterials, 2006
4. NICNAS Nanomaterial definition (NICNAS-Guidance on New Chemical Requirements for Notification of Industrial Nanomaterial), issued October 5, 2010
5. ISO Nanotechnologies -Vocabulary (ISO-TS_80004-1-2010)
6. EU nanomaterial definition (2011/696/EU), issued October 18, 2011
7. Presentation by Victoria Coleman at the ICONN conference (in Perth, February 6, 2012) outlining testing of six commercial sunscreens (including Invisible Zinc and Cancer Council products)

Key Correspondence

8. Email from John Robinson (Antaria) confirming the patent (US 2010-0310871 A1) is the basis for the ZinClear IM technology - February 24, 2012
9. Friends of the Earth letter to Antaria - May 21st, 2012
10. Friends of the Earth letter to Antaria - July 6th, 2012
11. Antaria response to Friends of the Earth - July 11th, 2012
12. Antaria ASX Announcement – July 25th, 2012
13. Friends of the Earth response to Antaria – August 3rd, 2012
14. Email from Emilie Cherhal (ECOCERT) confirming their decision to suspend certification of Antaria's product.