

FIELD REPORT

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CONTINUATION INQUIRY

POLYVINYL CHLORIDE HOMOPOLYMER RESIN (PVC)

EXPORTED FROM

JAPAN

AND

REVIEW OF ANTI-DUMPING MEASURES

PVC

EXPORTED FROM

THE UNITED STATES OF AMERICA AND JAPAN

VISIT REPORT - AUSTRALIAN INDUSTRY

AUSTRALIAN VINYL CORPORATION PTY LTD

This report and the views and recommendations contained therein will be reviewed by the case management team and may not reflect the final position of Customs and Border Protection .

March 2012

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**2. BACKGROUND**

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**2.1 The continuation inquiry**

On 9 December 2011, the Australian Customs and Border Protection Service (Customs and Border Protection) published a notice in *The Australian* newspaper inviting certain persons to apply to the Chief Executive Officer (CEO) of Customs and Border Protection for the continuation of anti-dumping measures that apply to polyvinyl chloride homopolymer resin (PVC) exported to Australia from Japan. On 7 February 2012, Australian Vinyls Corporation Pty Ltd (Australian Vinyls), the sole manufacturer of PVC in Australia, lodged an application for the continuation of the anti-dumping measures. The current anti-dumping measures on imports from Japan are due to expire on 21 October 2012.

Following consideration of the application the inquiry was initiated on 24 February 2012. Public notification of initiation of the inquiry was made in *The Australian* on 24 February 2012. Australian Customs Dumping Notice (ACDN) No. 2012/09 provides further details of the inquiry and is available at [www.customs.gov.au](http://www.customs.gov.au).

**2.2 The review**

On 2 February 2012, Chemiplas Australia Pty Ltd (Chemiplas) lodged an application for a review of the anti-dumping measures applying to PVC exported to Australia from Japan and the United States of America.

Following consideration of the application the review was initiated on 24 February 2012. ACDN No. 2012/08 provides further details of the review and is available at [www.customs.gov.au](http://www.customs.gov.au).

**2.3 Existing measures**

Anti-dumping measures were imposed on PVC resin from Japan in October 1992 and have since been subject to continuation inquiries every five years. The current measures for Japan are due to expire on 21 October 2012.

Anti-dumping measures were imposed on PVC resin from the USA in January 1992 and have recently been continued for a further five years; International Trade Remedies Report No 174 (REP 174) refers, and will apply to 23 January 2017 unless revoked earlier.

Measures imposed before 1 January 1993 ('old measures') are reviewed using the provisions of section 269TAD of the *Customs Act 1901* (the Act<sup>1</sup>) which were repealed in 1992 but remain in force under transitional arrangements.

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<sup>1</sup> A reference to a division, section or subsection in this report is a reference to a provision of the Act, unless specified.

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Section 269TAD provided that the Minister for Home Affairs (the Minister), if satisfied that any factor relevant to the ascertainment of normal values had altered, may re-ascertain normal values. 81

The non-injurious free on board prices (NIFOBs) may be varied according to subsection 8(5) of the *Customs Tariff (Anti-Dumping Act) 1975*, by virtue of section 33(3) of the *Acts Interpretation Act 1901* which provides that where an Act confers a power to issue an instrument the power shall be construed as including a power to vary the instrument.

There are no legislative timeframes for the completion of reviews under section 269TAD of the Act however the practice is to follow the same manner and time frame as reviews of the post 1 January 1993 measures.

Division 5 of Part XVB of the Act sets out, among other things, the procedures to be followed by the CEO in dealing with an application for the review of measures imposed from 1 January 1993.

### 2.4 Purpose of visit

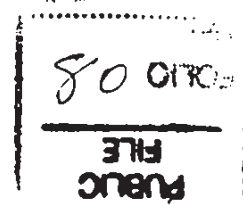
We explained to Australian Vinyls that the purpose of our visit was to:

- discuss the company's claims relating to the continuation of the anti-dumping measures;
- discuss the review process and application made by Chemiplas
- discuss procedural matters relating to the continuation inquiry and the review;
- verify information provided in the application, including sales and cost information;
- collect and verify other information relevant to the inquiry;
- discuss whether the expiration of the anti-dumping measures would lead (or would be likely to lead) to a continuance of (or recurrence of) the material injury that the anti-dumping measures were intended to prevent;
- give the company the opportunity to provide any further comments or raise any further issues it believed relevant to the investigation; and
- discuss methods to establish an unsuppressed selling price.

### 2.5 Contact details

Company:	Australian Vinyls Corporation Pty Ltd
Address:	65 Leakes Road, LAVERTON NORTH VIC 3026
Telephone:	03 9368 6221
Fax:	03 9368 4881
Date of visit	22-23 March 2012
Australian Vinyls Corporation (Australian Vinyls)	Peter Flinn, Sales and Marketing Manager Ian Owens, Commercial Manager Adnan Fetai, Accountant
Consultant	Mr John O'Connor
Customs and Border Protection Service	John Bracic, Director, Operations 1 Rod Jones, Manager, Operations 1 Rachel Lohan, Supervisor, Operations 1

## PUBLIC RECORD



### 2.6 Investigation process and timeframes

We advised Australian Vinyls that the inquiry and review would follow the same timelines, but that separate statements of essential facts (SEFs) and final reports would be issued. We outlined the processes and timeframes as follows:

- Initiation dates, 24 February 2012;
- Submissions, including exporter questionnaires, due by 4 April 2012;
- statements of essential facts (SEFs) due by 13 June 2012;
- submissions in response to SEFs due by 3 July 2012;
- final reports to Minister due by 30 July 2012.

In regards to the continuation inquiry in accordance with section 269ZHF the CEO must give a report to the Minister recommending that the Minister either:

- a) takes steps to secure the continuation of the anti-dumping measures the subject of the application or;
- b) that the anti-dumping measure expire on the specified expiry date.

We also explained that the CEO must not recommend that the Minister take steps to secure the continuation of the anti-dumping measures unless the CEO is satisfied that the expiration of the measure would lead, or would be likely to lead, to a continuation of, or a recurrence of, the anti-dumping measure is intended to prevent.

We advised Australian Vinyls that the review will examine only the NIFOB and normal values, (the variable factors), and that export prices are not a variable factor subject to a review under 'old measures'. At the conclusion of the review the Minister may set new variable factors or leave them unchanged. We also advised Australian Vinyls that revocation of the measures will not be examined during this review.

We informed Australian Vinyls that we would compile a confidential report on the visit, and provide the opportunity for Australian Vinyls to comment on the accuracy of the report. Following approval of this report a non-confidential version would then be prepared for the public record.

We also informed Australian Vinyls that all information provided by Australian Vinyls to Customs and Border Protection would be treated as confidential unless advised otherwise.

We explained the operation of the public file system, and the opportunity for Australian Vinyls and all interested parties to comment on reports and submissions placed on the public record, in particular the statements of essential facts for the continuation and review.

## 3 COMPANY BACKGROUND

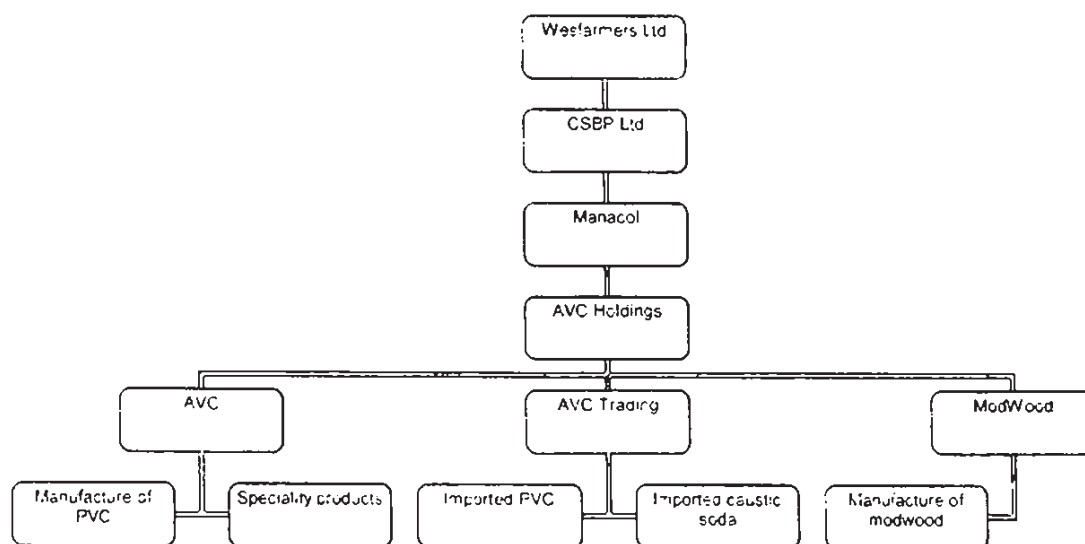
### 3.1 Company structure

Australian Vinyls was established in 1997 as a joint venture of the two PVC resin manufacturing operations then existing in Australia: ICI Vinyls (now Orica Australia Pty Ltd) and Auseon Limited (now PolyOne). Australian Vinyls became a wholly owned subsidiary of AVC Holdings Pty Ltd (AVC Holdings) in 2002. AVC Trading Pty Ltd (AVC Trading) was also formed in 2002 to import PVC.

In June 2004 AVC Holdings acquired a majority interest of 65% (and then acquired the remaining 35% interest in July 2005) in a company, ModWood Technologies Pty Ltd (ModWood). ModWood manufactures decking board from recycled milk bottles.

In June 2005 Australian Vinyls management, Colonial First State Investments Ltd and Colonial First State Private Capital Ltd formed a new company, Manacol Pty Ltd (Manacol). Manacol then acquired 100% of the shares in AVC Holdings. In September 2007, Manacol's shares were acquired by CSBP Ltd, which is 100% owned by Wesfarmers Ltd.

The company group structure is illustrated in the following diagram.



Australian Vinyls has the following product streams:

- locally manufactured PVC; and
- specialty products (plasticisers, stabilisers and impact modifiers and processing aids for extruders) for resale.

AVC Trading has the following product streams:

- imported PVC; and
- imported caustic soda for resale by Australian Vinyls.

## 3.3 Accounting practices

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Australian Vinyls has four businesses:

- resins (PVC);
- speciality products;
- caustic soda; and
- ModWood.

Australian Vinyls has been operating on a July to June financial year since the change of ownership in 2002. It uses JD Edwards' One World Financial Software (One World), an enterprise resource planning system, to record all production, costs, sales and accounting data. It uses a stand alone system to record payroll information.

Australian Vinyls advised it was unable to provide audited financial statements as it ceased producing audited financial reports in 2007 when it was acquired by CSBP. However, we were able to verify data to Manacol's consolidated income statement, which identified income and costs for each business. Australian Vinyls stated that this data is reflected in Wesfarmers audited financial statements.

Australian Vinyls uses standard costs which results in purchase price and efficiency variances. It accounts for variances monthly.

**4 THE GOODS AND LIKE GOODS**

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**4.1 The goods**

The goods covered by the dumping duty notices are PVC.

PVC is a white free flowing powder that is used in combination with other chemicals to produce a variety of products. PVC is sold to a range of processors who either extrude, inject, mould or blow mould the PVC to make a wide variety of goods. The major end-use of PVC based products is in the building and construction sector (e.g. pipes and fittings, cables, house cladding, gutters, down pipes, flooring and window frames). PVC based products are also used in packaging, upholstery and domestic appliances.

The goods subject to the anti-dumping measures do not include P/V/C compounds, pastes or emulsion grades.

**Tariff classification**

PVC is classified under sub-heading 3904.10.00, statistical code 18, in Schedule 3 to the *Customs Tariff Act 1995*. The rate of duty from the USA is free under the Australia-United States Free Trade Agreement. The rate of duty for PVC exported from Japan is 5%.

**4.2 Like goods**

In previous investigations, inquiries and reviews in respect of PVC, Customs and Border Protection determined that Australian Vinyls was the Australian industry producing like goods. On the basis of information provided by Australian Vinyls during this visit and previous visits, Customs and Border Protection considers Australian Vinyls is a producer of like goods.



**5 THE AUSTRALIAN INDUSTRY**

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**5.1 Australian production**

Australian Vinyls is the sole manufacturer of PVC in Australia. Its production facilities are in Laverton North, Victoria. The company manufactures PVC and wood-plastic compounds, as well as supplying a range of imported chemicals including caustic soda, PVC processing additives, synthetic rubbers and speciality elastomers.

The PVC produced by Australian Vinyls includes:

Grade	K value	Major End Uses
57R1	57.2	Rigid fittings, pipe elbows, caps, joins and inner core foam core pipe.
62R2	62	Rigid extruded profiles, non-pressure pipe
66R1 & 66R2	66	Rigid, pressure non-pressure pipe, conduit, profiles
67R1 & 67R2	67	Rigid, pressure non-pressure pipe, conduit, profiles
67F1	67	Flexible, electrical plugs, footwear, auto trims, flooring
71F1	71	Flexible, insulation sheathing of cables, catering film, hose, footwear

All PVC produced by Australian Vinyls is sold under the brand name "Corvic", technical data sheets for the above are at **non-confidential attachment G-1**.

**5.2 PVC production process**

PVC is a white free flowing powder that is used in combination with other chemicals to produce a variety of products.

The main input into the production of PVC is vinyl chloride monomer (VCM). VCM is manufactured by combining ethylene and chlorine to form ethylene dichloride that is cracked in a furnace. PVC is made in a batch process in which VCM droplets are

polymerised, while suspended in water, in the presence of an initiator and other additives. 75

Australian Vinyls advised that its strategy  [Information on Australian Vinyls' production strategy]

### 5.3 Capacity, employment and annual turnover

Australian Vinyls stated that its Laverton North plant has the capacity to produce approximately 140,000 tonnes of PVC per annum depending on the mix of PVC grades produced. The plant has two streams that produce the various grades of PVC.

Australian Vinyls employs approximately  people, of which about  are employed in the production and sale of PVC.

Australian Vinyls annual turnover is about  million, of which about % relates to produced PVC and about % to PVC imported by Australian Vinyls Trading.

All of Australian Vinyls PVC is sold on the Australian domestic market, no PVC is exported.

**6 AUSTRALIAN MARKET**

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**6.1 Market structure**

The Australian market for PVC is supplied through local production and imports from a number of sources. Australian Vinyls imports PVC from Taiwan to supplement domestic production.

PVC is sold to a range of processors who either extrude, inject, mould or blow mould the PVC to make a wide variety of goods. The major end-use of PVC based products is in the building and construction sector (such as pipes and fittings, cables, house cladding, gutters, down pipes, flooring and window frames). PVC based products are also used in water supply piping, packaging, upholstery and domestic appliances.

**6.2 Market size and demand**

During the recent continuation inquiry into PVC from the USA (Rep 174), Customs and Border Protection estimated the size of the market at slightly over 190,000 tonnes in the financial years 2009-10 and slightly below 190,000 tonnes in 2010-11. REP 174 showed the market peaking in 2007/08 at around 225,000 tonnes before declining in subsequent years.

In its application Australian Vinyls estimated the size of the market in the calendar year 2011 at approximately 180,000 tonnes. Australian Vinyls estimated the current market was at 190,000 to 200,000 tonnes per annum.

Australian Vinyls said that it relies on monthly forecasts from its larger customers to estimate demand for the next three months, however these forecasts can be unreliable.

Australian Vinyls said the market is weaker due to the effects of the global financial crisis and the breaking of the drought and floods. During the drought there was demand for large water projects requiring irrigation pipe, however the floods reduced demand as there was no longer a need for those projects. In addition it also became impossible to lay pipes in the flooded areas. The global financial crisis had an effect due to the slowdown in the construction industry which uses PVC for pipes, cables flooring, profiles, ducting, window profiles and siding. Technology improvements, such as using thinner walled pipes, can also affect demand as less material is required, however this may make PVC more competitive as it lessens the cost.

Australian Vinyls was also affected in the first half of 2008 by a prolonged plant shutdown that meant its larger customers could not get PVC at a time when the economy was still booming.

Customs and Border Protection estimated the size of the Australian market for the calendar years 2007-2011 using information from its import database and information supplied by Australian Vinyls. The market declined from 2007 to 2009 before increasing to approximately 200,000 tonnes per annum in 2010 and 2011. Movements in the size of the Australian market are illustrated in the following chart.

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Australian Vinyls

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### 3.3 Distribution arrangements

Australian Vinyls said that PVC is stored in bulk silos at its Laverton facilities and also in ☐ tonnes shipped by rail and stored at leased sites in different states. The PVC can also be stored at its customers sites using the customers silos and sold on a consignment arrangement where the customer pays for the PVC it uses each month from the amounts held on the site.

Australian Vinyls also advised that PVC may be delivered direct to customers as bulk shipments using B-double trucks. Approximately ☐% of its sales are bulk sales with other pack types being 25 kilogram bags comprising about ☐% of sales and bulk bags of one tonne comprising about ☐% of sales.

The Australian Vinyls produced Corvic brand is sold to all states, however when the market is strong PVC imported by Australian Vinyls is sold primarily in Queensland and Western Australia due to the high transport costs to sell Corvic there.

Australian Vinyls advised that its imported PVC is also stored on site around Australia, however the Corvic product takes priority over the imported product for sales.

### 3.4 Japanese imports

In its application Australia Vinyls noted that it was only able to identify imports from Japan in 2010 and 2011 due to restrictions on the country of origin being in force on published data.

Australian Vinyls said during the visit that PVC production in Japan had been affected in 2011 by the tsunami in March 2011 and the closure of a VCM plant in October 2011 due to an accident. (TOSOH's three VCM lines were shutdown in November 2011, with two scheduled to recommence production in May 2012).

## FINAL REPORT

Customs and Border Protection noted in its Consideration Report (DOI-184) for this inquiry that exports of PVC from Japan to Australia have maintained a presence in the market, albeit at declining volumes, since the last continuation inquiry.

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## SALES

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### 7.1 Introduction

Australian Vinyls provided monthly sales of domestically produced PVC in its cost to make and sell spreadsheet. It separately provided monthly sales of imported PVC. Prior to the visit, Australian Vinyls provided a sales ledger report with a line by line sales listing for the period October 2010 to December 2011. Australian Vinyls explained that it separately reported sales of locally produced PVC (company 10) and imported PVC (company 90).

#### 7.1.1 Reconciliation

We reconciled the sales data between the Appendix A 6 for domestically produced PVC, the Imports appendix and Appendix A 4 for all sales for 2011. There was a minor variance on sales revenue (-0.9%) for domestically produced PVC and minor variances on revenue (1.4%) and volumes (0.5%) for imported PVC between the appendices.

This reconciliation is at confidential attachment sales 1

#### 7.1.2 Pricing

Australian Vinyls explained that it negotiated prices with major customers monthly and formalised these prices in a price letter to the customer.

Australian Vinyls said that the pricing is based on [REDACTED] [commercially sensitive pricing details]. The [REDACTED] port and unloading charges in Australia and storage and distribution costs.

Australian Vinyls advised that volumes had an effect on pricing [REDACTED] [commercially sensitive pricing details]. PVC imported by Australian Vinyls was sold at the same price to its customers as its produced PVC.

#### 7.1.3 Rebates and discounts

Australian Vinyls said that rebates are offered to keep prices to individual customers confidential, rebates [REDACTED] [purpose].

Australian Vinyls [REDACTED] [commercially sensitive pricing details] were price and volume rebates. Others included rebates for accuracy in forecasting PVC requirements, market development and for PVC used in goods for export. The value of rebates varied from customer to customer.

Australian Vinyls advised that rebates were recorded in the sales ledger in the same month that the goods subject to the rebate were sold. However, it explained that one customer, [REDACTED] also received additional rebates that were [REDACTED] [details of additional rebates].

## 7.1.4 Selling and distribution

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Australian Vinyls stated that its largest customers were ☐ and ☐. These customers have several locations around Australia. Australian Vinyls explained that its price to these customers was the same regardless of the location and source of the PVC, locally produced or imported. However Australian Vinyls said that it did incur additional freight costs depending on where the goods were delivered. As a result, Australian Vinyls explained that it was most advantageous for it to sell domestically produced PVC to New South Wales, South Australia and Victoria and imported PVC to Western Australia and Queensland. However, Australian Vinyls explained that it was only able to do this when the market was large enough and it could sell all of its production in the southern states.

Australian Vinyls stated that it processes orders in two ways:

- c receives the order by phone which is entered directly into One World; and
- c according to a monthly delivery schedule – one order is raised for the month and delivered according to the delivery schedule.

Australian Vinyls stated that over ☐% of its sales are by consignment, the PVC is stored in silos at the customer's site and Australian Vinyls invoices the customer according to the amount of PVC used each month. The sale of PVC is booked as a sale and invoiced to the customer when the PVC is used, not when the PVC is delivered.

## 7.2 Verification of domestic sales

### 7.2.1 Verification to financial accounts (completeness)

As noted above, Australian Vinyl's accounts are not audited. However, we were able to verify data to Manacol's, consolidated income statement.

### 7.2.2 Sales of domestically produced PVC

Australian Vinyls provided Manacol's consolidated income statements for the months ended June 2011 and December 2011, the 12 months ended June 2011 and the six months ended December 2011. These documents are at confidential attachment sales 2.

Sales revenue and rebates are reported in Manacol as separate items, the A 4 appendices provided separate details on revenue and rebates whilst the A 6 appendix provides revenue net of rebates.

Whilst the revenues net of rebates reconciled to the A 6 with a minor discrepancy (0.002%) the rebates on the A 4 listing did not reconcile to the Manacol statement.

Australian Vinyls explained that this discrepancy was due to the additional ☐ rebates ☐ [details of additional rebates].

Australian Vinyls provided the June 2011 GMargin report, the sales ledger report listing the rebates and a listing of journal entries for that month. The rebates in the sales ledger report reconciled to the listing in the A 4, whilst the rebates inclusive of



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journal entries reconciled to the Manacol statement for June 2011. We are therefore satisfied that the [ ] additional rebates were the cause of the discrepancy. The net sales and volumes in the GMargin report reconciled to the A 5 data. Documents relating to the rebates and reconciliation are at confidential attachment sales 2.

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### 7.2.3 Sales of Imported PVC

The net sales on the Gmargin report for June 2011 matched to the A 4 and A 5 listing. The volume of [ ] tonnes on the Gmargin report matched to the A 4 listing but not the import appendix listing of [ ] tonnes for June 2011; this volume difference represented the difference noted at section 7.2.1. We considered that the A 4 and Gmargin reported the correct volume and changed the import appendix listing for June 2011 volume to [ ] tonnes. We noted that all of the [ ] additional rebates were applied against revenue from sales of domestic production. The value of these rebates attributable to imported PVC is not large enough to distort the analysis of Australian Vinyls' performance in respect of domestic production.

### 7.2.4 Verification to source documents (relevance and accuracy)

We selected eight sales transactions for verification from the A 4 sales listing and two associated rebate transactions. Australian Vinyls provided copies of sales and rebate invoices, proof of payment and pricing offers and formulae for the selected transactions. We were able to reconcile the documents to the listings and the pricing offers to the prices on the invoices. These documents are at confidential attachment sales 4.

## 7.3 Conclusion

We have verified the sales data provided in the application. We are satisfied the data is complete, accurate and reliable and sales of domestically produced PVC can be clearly identified from sales of imported PVC.



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### IMPORTS

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Australian Vinyls imports PVC via AVC Trading to supplement domestic production. Sales of domestic production and imports are separately recorded in Australian Vinyls' sales ledger. Price agreements with Australian Vinyls' customers are for PVC, regardless of whether it is domestic production or imports.

Australian Vinyls currently purchases its PVC requirements from [redacted]. The delivery terms are [redacted] and the payment terms are [redacted]. AVC Trading negotiates the price of PVC on a shipment by shipment basis. The negotiation is guided by the prices [redacted] and other industry bulletins.

Australian Vinyls imports and sells the Formosa PVC in bulk containers, bulk bags and 25 kilogram bags.

Australian Vinyls provided supporting documentation for four selected shipments, these documents are at confidential attachment imports 1. As noted above, Australian Vinyls does not distinguish between domestic production and imports in its sales process and in determining the profitability of the selected shipments it used selling prices and selling, general & administrative (SG&A) expenses from its cost to make and sell spreadsheet. Australian Vinyls provided monthly costings and profitability assessments of its imported PVC that showed overall the imported PVC was profitable for 2011.

## 9 COST TO MAKE AND SELL

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We explained to Australian Vinyls that we needed to be satisfied that the data submitted in the application was complete, relevant and accurate. The company would have to demonstrate that the data could be verified and traced to financial statements and to source documents.

### 9.1 Production volumes

We did not verify production volumes as all costs are calculated using sales volumes.

### 9.2 Verification of cost to make

#### 9.2.1 Variable manufacturing costs

Variable manufacturing costs comprise raw materials and direct labour. The cost of imported raw materials is identified in appendix A6. The various components of this cost are identified in a variable costs tab. The major component is the landed cost of VCM. Australian Vinyls stated that the price of VCM is based on [REDACTED] [REDACTED] [commercially sensitive purchase details].

We sought to verify the landed cost of VCM of [REDACTED] for December 2011, which accounted for about [REDACTED]% of the cost to make.

Australian Vinyls uses standard costs. The VCM landed cost has two components, the standard cost and the purchase price variance (PPV). The standard cost is calculated as follows:

- sales tonnes, excluding floor sweepings (total sales of [REDACTED] tonnes less floor sweepings of [REDACTED] tonnes – verified to the December sales listing report);
- multiplied by the standard cost (\$[REDACTED]);
- multiplied by [REDACTED] (tonnes of VCM required to make one tonne of PVC) to give the standard cost component of \$[REDACTED] million.

Documents relating to the standard costs for VCM are at confidential attachment costs 1.

A PPV is calculated for each shipment. The PPV for each month is the PPV in stock on hand at the end of the previous month plus the PPV for shipments during the month less the PPV on hand at the end of the month. Australian Vinyls provided a VCM PPV tracking spreadsheet (tracking spreadsheet) identifying shipments to the end of December 2011 and the PPV in stock on hand at the end of December (confidential attachment costs 2).

Australian Vinyls provided stock reports to verify stock holdings for the end of December for:

- all PVC stocks, including consignment stock, plus stock held for a particular customer, plus goods shipped but not invoiced ([REDACTED] tonnes);
- multiplied by [REDACTED] to represent VCM component ([REDACTED] tonnes);

- o VCM stock held at the terminal;
- o VCM held in tanks at Laverton; and
- o VCM stock in transit.

Documents for stock holdings are at confidential attachment costs 3.

The last shipment was number X150, with tonnes into terminal of [ ] tonnes, all of which was in stock. The previous shipment was X149, with tonnes into terminal of [ ] tonnes, of which [ ] tonnes is in stock.

The PPV for VCM for December is calculated as the difference of the closing balance of the PPV less PPV in stock. The PPV variance of \$[ ] for December 2011 is in the income statement for Manacol.

We then sought to verify costs for shipment X149 in the tracking spreadsheet. This spreadsheet records:

- o tonnes into terminal;
- o the standard cost of VCM for the shipment, based on tonnes into terminal;
- o total PPV for the shipment;
- o an adjustment reflecting the difference between the standard cost and the amount paid to the supplier;
- o ocean freight;
- o clearing charges; and
- o an adjustment reflecting the difference between the invoiced amount from the bill of lading and the tonnes into terminal, based on the standard cost of VCM in tanks at the terminal (Australian Vinyls stated that unless the quantity varies by more than 3%, it pays on the bill of lading quantity, not tonnes into terminal).

Australian Vinyls provided supplier invoices and bank statements supporting the purchase cost and freight cost for the VCM (confidential attachment costs 4). We verified the VCM and freight costs from the supplier invoices and to bank statements, there was a minor variance on the VCM cost of 0.02%.

We are satisfied that the raw material costs in the cost to make and sell spreadsheet reflect the actual raw material costs for the resins business in Manacol's consolidated income statement.

#### 9.2.2 Fixed costs and selling and distribution expenses

Australian Vinyls advised that during previous investigations, Customs and Border Protection stated that costs should be recorded in the cost to make and sell spreadsheet in the format required by Customs and Border Protection, even though the company does not record costs in that format.

To complete the cost to make and sell spreadsheet Australian Vinyls runs a separate cost centre report identifying the total labour and non-labour costs in each fixed cost centre. A separate wages and salaries report is then run for each cost centre to identify the labour component. Australian Vinyls uses these reports to then:

## FINING REPORT

- allocate a proportion of labour and non-labour costs from each cost centre to the resins business;
- further allocate costs to the cost to make, with the balance being allocated to SG&A expenses;
- allocate non-labour cost to make expenses to either variable or fixed costs;
- allocate labour cost to make expenses to direct labour costs; and
- allocates labour and non-labour SG&A costs to either selling or administrative expenses.

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For example, purchasing and logistic costs are recorded in cost centres [ ] and [ ]. [ ]% of these costs are allocated to the resins business. Australian Vinyls advised that the allocation percentages were determined some years ago.

Australian Vinyls provided a report by cost centre for the month and year to date ended December 2011, costs centres not associated with resins, such as Woodwood and AVC Trading are identified in a summary analysis report. The total of the reports reconciled to the business unit fixed costs on the Manacol income statement for December 2011. These reports are at confidential attachment costs 5.

Australian Vinyls also provided a separate wages and salaries report for December 2011 that reconciled to the Manacol statement, this report is at confidential attachment costs 6.

The reports reconciled to the spreadsheets provided with the CTMS appendices and were used to allocate the labour and fixed costs to variable overheads, fixed overheads and selling and administration costs.

We are satisfied that the fixed costs in the cost to make and sell spreadsheet reflect the actual fixed costs for the resins business in Manacol's consolidated income statement.

### 9.2.3 Other costs

Depreciation charges, recorded in fixed manufacturing charges, and transport charges, recorded in selling expenses, were taken from the resins component of Manacol's consolidated income statement.

### 9.2.4 Verification to financial accounts

Australian Vinyls provided a reconciliation to trading profit spreadsheet from A 6 to Manacol accounts as part of the appendices. We were also able to separately reconcile the material, manufacturing and transport costs of \$ [ ] million in the A 6 to the net revenue less gross margin in the Manacol income statement of \$ [ ] million. The labour and fixed costs reconciled to the Manacol income statement as noted previously.

## 9.3 Conclusion

We have verified the cost data provided in Appendix A6. We are satisfied the data is complete, accurate and reliable and only includes costs in respect of domestic sales of like goods.

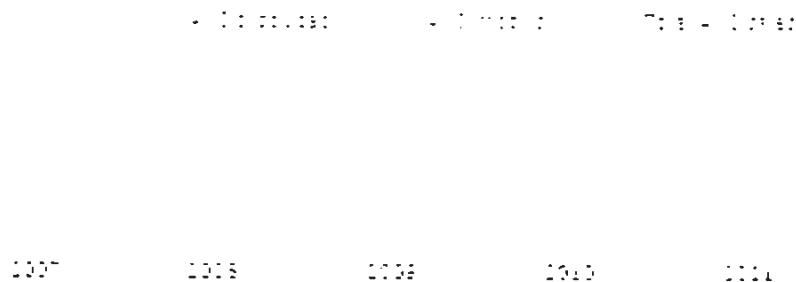
## 10 ECONOMIC CONDITION OF THE INDUSTRY

Australian Vinyls provided data until December 2011. The following analysis examines trends in respect of sales of local production and imports where noted, on a calendar year basis.

### 10.1 Volume effects

Movements in sales volumes are illustrated in the following chart.

#### Sales volumes



As noted previously, Australian Vinyls advised that its strategy [REDACTED] [information on Australian Vinyls' production strategy].

The lower sales volume in 2008 is attributable to a plant shutdown in March 2008. The shutdown was required to allow the installation of a new distributed control system. Sales volumes since 2008 have been steady and at the levels approaching maximum output.

Australian Vinyls sales of imported PVC rose in 2008 to help offset the shortage caused by the plant shut down but have been declining since then.

As Australian Vinyls has been producing close to optimum capacity market share would not appear to be not an injury factor relevant to this inquiry.

Australian Vinyls has also managed to sell all of its production though stock levels have risen in 2011 as noted further in this section.

### 10.2 Price effects

Price depression occurs when a company, for some reason, lowers its prices.

## APPENDIX 1

Price suppression occurs when price increases for the applicant's product, which otherwise would have occurred, have been prevented.

63

An indicator of price suppression may be the margin between revenues and costs.

Movements in unit revenues and costs are illustrated in the following chart.

### UNIT REVENUE AND COSTS

UNIT REVENUE AND COSTS

2007 2008 2009 2010 2011

Australian Vinyl's average price was relatively steady from 2007 to 2008 before declining in 2009 following the global financial crisis, prices have been steady since then. Prices have been depressed being lower from 2009 to 2011 than they were in 2007 and 2008.

Movements in both total and unit revenue and costs indicate that costs exceeded prices from 2008 to 2011.

The negative margin between revenue and costs has been increasing since 2008 indicating that prices have been suppressed.

## FIELD REPORT

### 10.4 Revenue, profit and profitability trends

Movements in revenue and total profits are illustrated in the following chart.

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#### AVC produced PVC

Revenue (M\$)      Profit (M\$)

2007      2008      2009      2010      2011

Revenue fell significantly in 2008, this was mainly due to the plant shutdown in March 2008. Revenues increased from 2008 as production came back on line. Total profits have been steadily decreasing since 2007.

Profitability is profit expressed as a percentage of revenue.

#### AVC produced PVC

Profitability (%)

2007      2008      2009      2010      2011

Profitability sharply decreased from 2007 to 2008 and has been on a steep decline since.

## 10.4 Summary of major injury indicators

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Injury factors indicate that the economic performance of the Australian industry has deteriorated from 2007 to 2011. Profits and profitability have increasingly declined from 2007 as costs rose above prices. Revenues have shown some decline whilst volumes appear to reflect the plant is running at capacity.

We consider that the decline in profits, profitability and the price suppression evident as costs have risen above prices indicates that Australian Vinyls is susceptible to further injury should the Australian PVC market deteriorate further or if other market pressures emerge.

## 10.5 Other injury indicators

Australian Vinyls provided an updated appendix A 7 summarising other injury indicators from 2009 to 2011.

Of these factors return on investment shows a decline from 2009 to 2011, revenues have decreased as noted and stock holdings after declining in 2010 have increased in 2011.

Data relating to the analysis of the economic condition of Australian Vinyls is at confidential appendix 1.



11	WILL DUMPING AND MATERIAL DAMAGE CONTINUE OR RECUR
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#### 11.1 Will dumping continue or recur

##### 11.1.1 Will exports from Japan continue

Customs and Border Protection's import database indicates that there were low volumes of imports of PVC from Japan since 2007.

In its application, Australian Vinyls highlighted that Japan is the world's second largest producer of PVC globally and over 2011 its production utilisation rate was only 71%, which suggests considerable excess capacity. Australian Vinyls also provided data on New Zealand imports. Australian Vinyls highlighted that PVC import volumes from Japan increased by 54% over 2011 on the previous year to demonstrate Japan's exporters are capable of increasing volumes to capitalise on opportunities for supply.

In its application Australian Vinyls also suggested that the publication, Harriman Chemsult, in December 2011 indicated that Japanese exporters are seeking markets due to sluggish domestic demand. Japanese production of VCM and PVC has been severely disrupted by two recent events: the earthquake and subsequent tsunami early in 2011 and the fire and explosion at the TOSOH complex in Nanyo in September 2011. Production at the No 1 and No 3 plants is expected to resume in 2012 increasing availability for an expansion of PVC production and exports.

Australian Vinyls said at the visit that PVC production in Japan had been affected by the tsunami in March 2011 and the closure of a VCM plant in October 2011, however Japan was still the largest producer in the Asia region and exported 300,000 - 400,000 tonnes per month.

##### 11.1.2 Will dumping continue or recur

In its application, Australian Vinyls provided Harriman Chemsult data on domestic and export prices in Japan for 2011 and New Zealand import statistics on PVC from Japan for 2011. Australian Vinyls calculated monthly dumping margins for 2011 for PVC imported into New Zealand from Japan; the margins ranged from 32 – 91%.

Australian Vinyls claims were assessed in Consideration Report 184 (Con 184) which noted given the margins calculated it is reasonable to conclude that exports (from Japan to New Zealand) were at dumped prices.

Australian Vinyls said that prices in the Asia region were low due to the presence of low priced exports from the USA. The USA producers were looking for new markets to sell into as the USA domestic market had very little demand, the prices of the USA exports were affecting pricing of other exporters, including Japan in the region. This situation made it more likely that exports from Japan would be lower priced and more likely to be dumped.

## FIELD REPORT

Australian Vinyls considers that with the resumption of VCM production at the TOYOHI Line 1 and 3 facilities, there will likely be an increase in Japanese PVC export volumes – particularly given the slow domestic demand in Japan. 59

### 11.2 Will material injury continue or recur

In its application Australian Vinyls claimed that its financial position in 2012 was precarious with domestic selling prices declining, price suppression being experienced and profit and profitability deteriorating. Australian Vinyls asserted in the application that the prices of PVC exported from Japan to New Zealand in 2011 if exported to Australia and after adding costs to approximate a like score price would have undercut its average selling price that would likely have caused it to respond by lowering its prices resulting in additional injury.

We noted that Australian Vinyls profitability was positive in 2007 but has been declining since then. The volume of imports from Japan over this period was minor and we asked Australian Vinyls to explain these results in a period where anti-dumping measures applied to PVC from the USA.

Australian Vinyls explained that three years ago it installed new software that did not work very well and this lead to shortages in the market when it had to shutdown the plant in March 2008. Australian Vinyls claimed it would have made a profit if it were not for this problem.

Australian Vinyls said that the global financial crisis also affected the market and that in 2009/10 dumped exports from the USA and other countries to the Asia region affected prices in that region which had a flow on effect to Australia Vinyls pricing.

Australian Vinyls explained that PVC was a commodity product and the price in Australia was influenced by global factors. The price in Australia was particularly influenced by the price of PVC in Asia, as listed in industry publications such as Harriman Chemsult. The publications meant that prices in the market were quite transparent. Australian Vinyls stated that the influence of the USA on these prices was critical. Australian Vinyls provided Harriman Chemsult reports for June, July and December 2011 discussing the PVC market, these documents are at confidential attachment ini 1.

Australian Vinyls also provided a graph on PVC prices and profits in East China in 2011 that showed PVC was being sold unprofitably since May 2011 and thus demonstrated the pricing pressures on PVC in the region. This graph is at confidential attachment ini 2.

Australian Vinyls said that in 2011 its results had been affected by imports from Korea that it alleged were at dumped prices and injurious.

Australian Vinyls also said that from 2008 its major customers, [REDACTED], had been a formula driven price based on [REDACTED]. However from [REDACTED] and started taking Korean imports and asking Australian Vinyls to match the import prices.

## FIELD REPORT

Australian Vinyls believed that Korean exports had been displaced from their traditional markets by the low priced USA exports and that Korean exporters were seeking new markets in Australia. 5-8

Australian Vinyls said that Korean imports into Australia were subject to the general 5% duty and would need to be dumped to compete with exports from Thailand which were not subject to the 5% duty.

**12 UNSUPPRESSED SELLING PRICE**

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Customs and Border Protection generally derives the non-injurious price<sup>2</sup> by first establishing a price at which the applicant might reasonably sell its product in a market unaffected by dumping. This price is referred to as the unsuppressed selling price (USP). Having calculated the unsuppressed selling price, Customs and Border Protection then calculates a non-injurious price by deducting the costs incurred in getting the goods from the export FOB point (or another point if appropriate) to the relevant level of trade in Australia. The deductions normally include overseas freight, insurance, into-store costs and amounts for importer expenses and profit.

This inquiry is not reviewing any of the variable factors (the normal value and the non-injurious price), however a review of the measures applying to Japan and the USA was initiated following consideration of an application from Chemiplas.

We noted that in its application Australian Vinyls had calculated a USP based on its CTMS plus a level of profit achieved in 2006 and asked why profits or selling prices from later years should not be considered.

Australian Vinyls said that its prices from 2008 had been affected by other factors such as construction demand and the drought and floods as noted at sections 6.2 and 11.2. Australian Vinyls also did not consider the prices of other imports in the market as an appropriate reference as these prices would have been affected by the allegedly dumped imports from Korea.

Australian Vinyls said that a USP based on CTMS plus the level of profit it achieved in 2007 may be appropriate, however it also said that this profit had been distorted by a large one off impairment item in June 2007 that needed to be taken into account.

Australian Vinyls said that it would provide further details on this item.

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<sup>2</sup> The current measures have been in place since 1992 and the legislation at that time referred to the non-injurious FOB price. Any reference to the non-injurious price includes reference to the non-injurious FOB price.

10 GENERAL COMMENTS

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Australian Vinyls stated that it had experienced difficulties with falling demand in the domestic market over the period since 2008. The end of the drought across Eastern Australia prompted the government to terminate plans to use PVC piping to pipe water across the country to major capital cities to ease concerns over water security. In addition, heavy flooding across the Eastern seaboard had prevented the laying of PVC pipes.

Australian Vinyls also pointed to falling demand for PVC from the housing construction market across Victoria, New South Wales and Queensland for deteriorating market conditions.

Australian Vinyls highlighted PVC pipe product development which is being engineered to become more light weight resulting in a reduction in volumes of PVC resin used in pipe production as a further factor which is suppressing demand.

Australian Vinyls commented that due to the falling domestic demand the volume of imported product it imports to supplement supply has decreased. In the past Australian Vinyls had the option of reducing import volumes should overall demand decrease, however this buffer is no longer an available option.

Australian Vinyls highlighted that it has undertaken product development to meet customers' (Armstrong Industries) expectations to create a green star compliant PVC resin for use in green star buildings. Australian Vinyls also noted that it had developed a locally produced grade of PVC in conjunction with Armstrong Industries to replace the imported PVC it used to use.

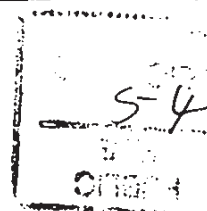
Australian Vinyls stated green star compliant products are currently not available through imported sources.

# EXHIBIT 10

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## 10 ATTACHMENTS AND APPENDIX

Non-confidential attachment G-1	Technical data sheets Corvic PVC
Confidential Appendix 1	Data for Australian Vinyls economic condition
Confidential attachment sales 1	Reconciliation of sales of domestic production
Confidential attachment sales 2	Manacol statements
Confidential attachment sales 3	Rebates
Confidential attachment sales 4	Selected sales and rebates transactions
Confidential attachment imports 1	Selected import documents
Confidential attachment costs 1	VCM standard cost
Confidential attachment costs 2	VCM FFV tracking sheet
Confidential attachment costs 3	Stock reports
Confidential attachment costs 4	VCM and shipping invoices and payments
Confidential attachment costs 5	Cost centres reports
Confidential attachment costs 6	Wages and salaries
Confidential attachment Inj 1	PVC market reports
Confidential attachment Inj 2	PVC prices and profits East China 2011



## Technical Data Sheet



ANABRELLAN VINYL CORPORATION PTY LTD

# Corvic<sup>®</sup> Vinyl

Product

Resin and Filler

Form

White Powder, 25kg and 50kg bags

### 1. Description

'Corvic' 57F1 is a low molecular weight vinyl suspension homopolymer. It is a free flowing white powder that can be delivered in a range of pack types. To allow the resin to be processed and to achieve the desired properties in the end product, the powder must be mixed with other additives. These may include stabilisers, lubricants, processing aids, fillers, pigments and other property modifiers.

'Corvic' 57F1 is designed for injection and blow moulding of rigid vinyl products and for the inner core of foam core pipe.

### Applications

Rigid products such as injection moulded fittings for pipe and conduit. Blow moulding of high clarity bottles, inner core for foam core pipe. This resin may also be used to make extruded profiles including architectural cladding, window extrusions such as vinyl cladding and rigid panelled sheet.

### Specifications

Conforms to the requirements of International Standards for PVC in contact with food.

Notes

Corvic<sup>®</sup> is produced at Anabrellan Vinyl Corporation Pty Ltd's plant at Lewisham.  
Anabrellan Vinyl Corporation Pty Ltd ABN 11 5 072 852 325 is an ISO 9001 Quality Endorsed Company.

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Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains.

Property	Test Method	Value	Units
Losses	Gravimetric	0.12	%
Total Soluble Matter	Loss of Mass at 105 ± 1 °C/min	0.19	% w/w
Particle Size > 150 µm < 50 µm	Laser diffraction	2.0 3.0	% %
Apparent Viscosity	120 rpm	620	µPa
Dr. J Prescribe - Suspension (Dr. J API)		100	% w/w
Residual Heavy Metals (Monomer solvent)	1200 ppm	0.07	ppm

1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2

### Section 10: Self-Reflection

These first programs and projects are mostly, thus far, focused on the young men, the most serious offenders. In addition, there are some pilot programs aimed at criminal juveniles as well. Other key steps

His dishevelled, offbeat, and ragged appearance, and the  
Trench coat of a fugitive, made

At Abarbellen Plaster Company you fly Little plane or leave  
in Little ABU 13 073 686 3434 on ISO 600m Quality Check



## Technical Data Sheet

# CORVIC®

Technical Data Sheet for CORVIC®

## Vinyl

### Grade

32P2

### Major End Uses

PEX, PE, HDPE, LLDPE

### Description

CORVIC® 32P2 is a medium-low molecular weight, high density suspension homopolymer. It is a free flowing white powder that can be delivered in a range of pack types. To allow the resin to be processed and to achieve the desired properties in the end product, the powder must be mixed with other additives. These may include stabilisers, lubricants, processing aids, fillers, pigments and other property modifiers.

CORVIC® 32P2 is designed for the extrusion of rigid vinyl products and may result in higher output rates than CORVIC® 32P1.

### Applications

Rigid products such as extruded profiles and non-pressure pipes. The low melt viscosity of this grade aids in the manufacture of complex extruded shapes.

The resin may also be used for the injection moulding of rigid fittings.

It is not recommended for flexible applications.

### Specifications

Conforms to the requirements of International Standards for use in product applications.

CORVIC® is produced at Australian Vinyls Corporation Pty Ltd's plant at Laverton.  
Australian Vinyls Corporation Pty Ltd ASX:AVC 073 559 896 is an ISO 9001 Quality Endorsed Company.

Doc. Code: R/PES/SM/TMSP29- Revision: 4 Page 1 of 1  
In Standard Controlled Documents R/PES Resins Specifications Technical Data Sheet 32P2 Technical Data Sheet 32P2



## Technical Data Sheet

POLY  
No. 50

# Corvic®

## Vinyl

Grade

Major End Use

66821

66821 塑料和涂料

### Product description

Corvic 66821 is a medium molecular weight vinyl suspension homopolymer. It is a free flowing white powder that can be delivered in a range of pack types. To allow the resin to be processed and to achieve the desired properties in the end product, the powder may be mixed with other additives. These may include stabilisers, plasticisers, lubricants, processing aids, fillers, pigments and other property modifiers.

Corvic 66821 is designed for the production of unplasticised vinyl products.

### Applications

Rigid products such as pressure and non-pressure pipe, conduit and many types of profiles including rigid vinyl siding.

The resin is also used in extruded flexible applications.

### Key features

Conforms to the requirements of international standards for use in contact with food.

Corvic® is produced at Australian Vinyls Corporation Pty Ltd's plant in Laverton.  
Australian Vinyls Corporation Pty Ltd ABN 16 075 535 595 is an ISO 9001 Quality Endorsed Company

Doc. Code: AVEB562MTC/AF126 Revision: 1 Page 1 of 2 Issue Date: 08/04/2012  
Uncontrolled/Unapproved Documentation PER Customer Use/Unapproved Data Sheet 13371 A 13372 Technical Data Sheet.doc

FOLIO 49  
 No.

# Technical Data Sheet

(Indicate the name of the product)

## 2074 RIGHT EDITION

### PHYSICAL PROPERTIES

Property	Test Method	Value	Units
Color	D1531-14	11	
Total Volatile Matter	Loss of Mass : 100°C / 20 mins	0.1	% w/w
Hardness (DIN)	Linear indentation	4	
		2	
Apparent Density	ISO 600	900	g/l
Zero Shear Stress (at 20°C)	ISO 600	10	% w/w
Residual Film Content (at 20°C)	ISO 600	10	% w/w

(Indicate the name of the product)

Refer to the technical data sheet for the product.

The data is for the product in the form of the data sheet.

All data is for the product in the form of the data sheet.

All data is for the product in the form of the data sheet.

2074 is a product of the Apple Corporation.

## Technical Data Sheet

**Corvic<sup>®</sup>**  
**37FI**

www.basellabs.com

### ATRS

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### ATRS Additives

0000000000

### Description

Corvic 37FI is a medium molecular weight vinyl suspension homopolymer. It is a free flowing white powder that can be delivered in a range of peck types. To allow the resin to be processed and to achieve the desired properties in the end product, the powder must be mixed with other additives. These may include stabilisers, plasticisers, lubricants, processing aids, fillers, pigments and other property modifiers.

Corvic 37FI is designed to be used as a dispersible powder, allowing feed manufacturers the flexibility to produce

### Applications

Feed pellets, dry mixes, liquid feeds, liquid supplements, piglet milk replacer, poultry supplements, water conditioners, feed additives and more. Corvic 37FI has a number of uses and is also used for solution of liquid products.

### Specifications

Conforms to the requirements of International Standards for feed ingredients.

Corvic<sup>®</sup> is produced by Basellabs (Borealis) Polymers Pty. Ltd. (a subsidiary of Basell)  
Basellabs (Borealis) Polymers Pty. Ltd. (Borealis) is an ISO 9001 Quality Endorsed Company.

# Technical Data Sheet

Australian Angly Corporation Pty Ltd

1771

EMULSIFIANT

## PHYSICAL PROPERTIES

Property	Test Method	Value	Unit
Form	180-1820L	0.1	-
Total Volatile Matter	Loss of Mass : 135° for 20 mins	0.10	% w/w
Particle Size + 250 µm + 20 µm	Laser diffraction	1.0 3.0	%
Apparent Density	180-180	845	g/l
Cloud Point (at 100°C)	180-180	25.0	°C/min
Residual Free Chloride (Chlorine content)	180-180	1.0	% w/w

180/180

Refer to the Australian Angly product label, Data Sheet for product Angly.

Also refer to the product label to see data handling of P-10 Protein supplied by Australian Angly.

All information contained in this Data Sheet is accurate and up to date as provided. Since Australian Angly cannot endorse or guarantee the performance of this product, users should refer to the information in the product label for the intended application. Australian Angly will not be responsible for damages or problems resulting from the use of products not for the information. No warranty is made for any damages or problems resulting from the use of products not for the information. No warranty is made for any damages or problems resulting from the use of products not for the information.

Values quoted for properties of "Product" Angly are the result of tests on representative samples, and the product supplied may not conform in all respects. "Product" is a Registered Trade Mark of Australian Angly.

Product is produced at Australian Angly Corporation Pty Ltd, 180-180, Quality Endorsed Company.

Doc. Code: A/RES/CONT/SP/207 - Revision: 1 - Page 2 of 2  
 Uncontrolled Document A/RES/RES/SP/207/2017 Technical Data Sheet 1771 Technical Data Sheet

## Technical Data Sheet

# Corvic<sup>®</sup> Vinyl

Grade

T1F1

Major End Uses

FLEXIBLE VINYL

### Description

Corvic T1F1 is a high molecular weight, low compressibility compound. It is a free flowing white powder that can be delivered in a range of particle types. To allow the resin to be processed and to achieve the desired properties in the end product, the powder must be mixed with other additives. These may include stabilisers, plasticisers, antioxidants, processing aids, fillers, pigments and other property modifiers.

Corvic T1F1 is designed to absorb plasticiser in quantities common to used to manufacture flexible vinyl products.

### Applications

Flexible products such as insulation and sheathing of electrical cable, garden and industrial hose, clear piping, water-laid sheet, packaging film, automotive and vehicle plating products, medical products and footwear.

### Key Information

Product is not registered to International Standards for use in certain applications.

Corvic<sup>®</sup> is produced at Australian Vinyls Corporation Pty Ltd's plant at Laverton.  
Australian Vinyls Corporation Pty Ltd ASX:AVS 678 555 555 is an ISO 9001 Quality Endorsed Company.

# Technical Data Sheet

45

REF.

REF. 000000

## APPROXIMATE PROPERTIES

Property	Test Method	Value	Units
Thickness	ISO 1814	0.10	mm
Total width (mm)	Loss (mm) 1814 (mm)	1.00	mm
Particle Size + 250 µm - 500 µm	Laser diffraction	100 500	µm
Apparent Density	ISO 90	0.90	g/cm³
Volume Fraction	ISO 9015	0.1	Volume %
Data Standard (mm)	ISO 9015	0.10	mm
Particle Size (mm)	ISO 9015	0.10	mm

Notes:

Refer to the standard ISO 1814 (mm) for the test method.

Also refer to the standard ISO 1814 (mm) for the test method.

Information provided in this data sheet is for reference only. It is not intended to be used as a substitute for the product's technical data sheet. The product's technical data sheet is the only source of information for the product's properties and should be used in conjunction with the product's technical data sheet. The product's technical data sheet is the only source of information for the product's properties and should be used in conjunction with the product's technical data sheet.

Since quality is a property of the product, it is the responsibility of the user, and the product supplier, to ensure that the product is of the highest quality.

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