MEMORANDUM TO: Jeffrey I. Kessler  
Assistant Secretary  
for Enforcement and Compliance

FROM: James Maeder  
Deputy Assistant Secretary  
for Antidumping and Countervailing Duty Operations

SUBJECT: Issues and Decision Memorandum for the Final Affirmative Determination in the Less-Than-Fair-Value Investigation of Acetone from the Republic of Korea

I. SUMMARY

The Department of Commerce (Commerce) determines that acetone from the Republic of Korea (Korea) is being, or is likely to be, sold in the United States at less than fair value (LTFV), as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The petitioner in this investigation is the Coalition for Acetone Fair Trade (the petitioner). The period of investigation (POI) is January 1, 2018 through December 31, 2018.

We analyzed the comments submitted by the interested parties in this investigation. As a result of this analysis, we recommend that you approve the positions described in the “Discussion of the Issues” section of this memorandum. A complete list of the issues in this investigation on which we received comments is provided below:

Comment 1: LG Chem’s Joint Cost Allocation Methodology
Comment 2: KPB’s Cost Allocation Method
Comment 3: KPB’s Purchases from Affiliates
Comment 4: LG Chem’s Non-Operating Expenses
Comment 5: LG Chem’s G&A Expense Ratio Calculation

1 The members of the Coalition for Acetone Fair Trade are AdvanSix Inc., Altivia Petrochemicals, LLC, and Olin Corporation.
II.  BACKGROUND

On September 24, 2019, Commerce published the Preliminary Determination of sales at LTFV of acetone from Korea. Between October 21 and November 19, 2019, we conducted cost and sales verifications of mandatory respondents, LG Chem, Ltd. (LG Chem) and its wholly-owned affiliate, LG Chem America, Inc. (LGCA), and Kumho P&B Chemicals, Inc. (KPB), in accordance with section 782(i) of the Act.

The petitioner, KPB and LG Chem submitted case briefs and rebuttal briefs on January 7 and January 13, 2020, respectively. We held a public hearing on January 23, 2020, to address issues raised in the case and rebuttal briefs.

III.  SCOPE OF THE INVESTIGATION

The product covered by this investigation is acetone from the Republic of Korea. For a complete description of the scope of this investigation, see Appendix I of the accompanying Federal Register notice.

IV.  CHANGES SINCE THE PRELIMINARY DETERMINATION

Based on our review and analysis of the comments and minor corrections presented at the verifications of both respondents, we made certain changes to the margin calculations for both respondents. For the Final Determination, as discussed in Comment 1, we recalculated LG Chem’s joint cost allocation of production costs to acetone and phenol using the direct assignment methodology for the final determination. We also adjusted KPB’s transfer price for

---

See Acetone from the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures, 84 FR 50005 (September 24, 2019) (Preliminary Determination), and accompanying Preliminary Decision Memorandum (PDM).


an input purchased from an affiliated supplier to reflect a market price of the input, noted below in Comment 3, and adjusted LG Chem’s general and administrative (G&A) expense ratio to exclude losses from investment activity, noted below in Comment 4. Finally, we revised LG Chem’s U.S. bank charges and payment date8 for certain sales, and KPB’s U.S. credit expenses9 and financial expense ratio calculation as a result of the minor corrections presented during their respective verifications.

V. DISCUSSION OF THE ISSUES

Comment 1: LG Chem’s Joint Cost Allocation Methodology

In the normal course of business, LG Chem treats acetone and phenol as coproducts and allocates the joint production costs between acetone and phenol production based on the relative corresponding net realizable value (NRV) of each coproduct. Because LG Chem normally estimates the NRV of these coproducts based on the China Main Ports (CMP) price index published by the Independent Chemical information Services (ICIS) (i.e., non-market economy prices), Commerce recalculated the joint cost allocation of production costs to acetone and phenol using the ICIS South East (SE) Asia price index in the Preliminary Determination.

LG Chem’s Case Brief

- Section 773(f)(1)(A) of the Act provides that costs shall normally be calculated based on the records of the exporter or producer of the merchandise, if such records are kept in accordance with the generally accepted accounting principles (GAAP) of the exporting country (or the producing country, where appropriate) and reasonably reflect the costs associated with the production and sale of the merchandise.10 The dispute in this case is over the second requirement in the statute, i.e., whether LG Chem’s normal cost allocation methodology “reasonably reflect the costs associated with the production and sale of the merchandise.”
- Allocating the joint production costs using the NRV that is based on the ICIS CMP price index is reasonable for multiple reasons.
  - First, the value-based allocation methodology has been historically used by LG Chem and the court has emphasized the reliability of the costs as historically reported by the company.11 Further, the ICIS CMP price index is third-party information that is less subject to possible distortions.
  - Second, Commerce has used value-based allocation methodologies in the past and the court has approved its use.12

8 See Memorandum, “LG Chem, Ltd.’s Final Analysis Memorandum,” dated concurrently with this memorandum.
9 See Memorandum, “Kumho P&B Chemicals, Inc.’s Final Analysis Memorandum,” dated concurrently with this memorandum.
12 See Notice of Final Determination of Sales at Less Than Fair Value: Polyvinyl Alcohol from the People’s Republic of China, 68 FR 47538 (August 11, 2003) (Polyvinyl Alcohol from China 2003), and accompanying IDM at Comment 3; see also Sinopec Sichuan Vinylon Works v. United States, 366 F. Supp. 2d 1339, 1346-47 (CIT
Third, LG Chem does not simply adopt the Chinese prices. Rather, the ICIS CMP price index was used as a reference for the internal forecasting of the NRV.

Fourth, LG Chem submitted several benchmark calculations and they showed that LG Chem’s value-based methodology based on the ICIS CMP price index was reasonable when compared to other possible benchmarks.13

LG Chem used the same ICIS CMP price index as the basis to set its sales prices to one of its main U.S. customers.14 As such, Commerce should accept LG Chem’s value-based methodology.

Nevertheless, if Commerce continues to use the ICIS SE Asia price index, it should use the POI average SE Asia price instead of using prices based on certain points in time to set the average price for each quarter.15

Petitioner’s Case Brief

- LG Chem and KPB produce acetone using the cumene process, and the chemical reactions are such that the benzene portion of the cumene molecule becomes phenol, whereas the propylene portion of the cumene molecule becomes acetone.16 Therefore, acetone prices and costs are linked to propylene prices.

- It is typical in the industry that benchmark prices for acetone are tied to propylene costs, whereas benchmark prices for phenol are tied to benzene costs.17 This was recently confirmed by the Commission.18 Also, it is typical in the industry for producers to assign costs to acetone based on the contained propylene.19 This was also confirmed by the Commission and it was acknowledged by all parties that the cost of acetone effectively is the cost of the contained propylene.20

- While KPB employed a methodology that is consistent with the industry standard, LG Chem allocated the cumene costs to acetone and phenol using the relative sales values for acetone and phenol. Further, as the source for those sales values, LG Chem relied on the ICIS CMP price index. LG Chem’s methodology does not comply with the industry standards because it assigns both propylene and benzene costs to both acetone and phenol in a manner that is entirely unrelated to the amount of each raw material input actually contained in each finished product.

---

14 See LG Chem and LGCA Sales Verification Report, at Exhibit 18.
15 See LG Chem’s Refiled Rebuttal Comments.
16 See KPB Cost Verification Report at 12; see also KPB’s July 11, 2019 Supplemental Section D Response (KPB’s SSDR) at SD-14; Petition’s Letter, “Petitions for the Imposition of Antidumping on Imports of Acetone From Belgium, Korea, Saudi Arabia, Singapore, South Africa, and Spain - Volume I,” dated February 19, 2019 (Petition), at 17; and LG Chem’s April 26, 2019 Section A Response at 32.
17 See Petition at 17 and 21.
18 See Acetone from Singapore and Spain, USITC Pub. No. 4997 (December 2019), Views of the Commission at 31 (USITC Final Determination).
19 See KPB’s SSDR at SD-14; and KPB Cost Verification Report at 19.
20 See USITC Final Determination at 32 and 36-37.
• Although Commerce properly rejected LG Chem’s distortive joint cost allocation methodology in the Preliminary Determination, the appropriate remedy was not to substitute the SE Asia prices for those Chinese prices. Under the circumstances presented in this case, the value-based allocation methodology is inappropriate and the joint production costs should be directly assigned to acetone based on the cost of contained propylene.

• While Commerce has accepted the value-based allocation methodology in certain limited circumstances, Commerce “has long recognized that a value-based cost allocation methodology is problematic in an antidumping context.”

• The most obvious problem is the potential circularity of the analysis, whereby prices are used to determine the product-specific costs, which in turn are either compared to those same product-specific prices or are used to determine prices (i.e., through the sales-below-cost test and constructed value). There is a similar circularity in using prices, which may themselves be dumped, to allocate the costs used to determine whether dumping occurred in the first place.

• The value-based allocations also present the potential for distortion, particularly in instances where there are volatile prices or shifting relative values, temporary surges in supply and demand, and specific market preferences for specific products. Therefore, Commerce stated that “the use of a value-based cost allocation method is appropriate in an antidumping context in only very limited instances.”

• Although Commerce replaced LG Chem’s value-based allocation that was based on the Chinese prices with the SE Asia prices, Commerce did not address any of the concerns discussed in the above.

• Further, it is unclear why the SE Asia prices are an appropriate allocation driver, given that the Southeast Asia prices are still volatile, and the region is geographically unconnected to this case. Where Commerce has accepted the value-based allocations, it has required that they be premised on the respondent’s “weighted-average world-wide prices.”

21 See Notice of Final Results of Antidumping Duty Administrative Review, and Final Determination to Revoke the Order In Part: Individually Quick Frozen Red Raspberries from Chile, 72 FR 6524 (February 12, 2007) (Frozen Raspberries from Chile 2007), and accompanying IDM at Comment 1; see also Notice of Final Results of Antidumping Duty Administrative Review and Notice of Final Results of Antidumping Duty Changed Circumstances Review: Certain Softwood Lumber Products from Canada, 69 FR 75921 (December 20, 2004) (Softwood Lumber Products from Canada 2004), and accompanying IDM at Comment 3.

22 Id.


Because the cost of the upstream inputs, propylene and benzene, can be directly assigned to each co-product, it is unnecessary to allocate cumene costs between acetone and phenol.

For the above reasons, the direct assignment methodology is superior to the value-based allocation methodology, including the fact that it is consistent with Commerce’s normal preference for direct assignments over allocations. Moreover, KPB uses the direct assignment methodology and thus, application of that same methodology to LG Chem avoids generating artificial and arbitrary differences in acetone costs and dumping margins between the two entities.

Commerce has accepted the value-based cost allocation methodology in other cases where there was no alternative method to link certain inputs to finished products. However, given the unique circumstances of this case, it would be unreasonable to use the value-based allocation methodology.

LG Chem also calculated the production costs for inputs used in the upstream production processes (i.e., prior to the cumene production) based on the value-based allocation methodology. However, no upstream inputs are separately traceable to outputs and thus, an allocation of upstream input costs is unavoidable. Nevertheless, the fact that an allocation is necessary at one stage of production is no reason to introduce additional distortion by using another allocation at a subsequent stage of production where it is unnecessary to do so.

Alternatively, if Commerce determines that LG Chem’s acetone costs cannot be calculated as the direct assignment of contained propylene costs, a volume or weight-based allocation method should be used.

**LG Chem’s Rebuttal Brief**

- Petitioner has not demonstrated that LG Chem’s value-based allocation methodology does not “reasonably reflect the costs associated with the production and sales of the merchandise.” Section 773(f)(1)(A) of the Act directs Commerce to consider “all available evidence,” but puts particular emphasis on what “allocations have been historically used” by the company. Further, the statute requires only that the method “reasonably reflect the costs,” not that the method perfectly or most reasonably reflect the costs.
- Commerce has never said that the value-based allocations are always a problem, only that there is a “potential problem with circularity.”

---

27 See 19 CFR 351.401(g).
29 Id.
30 See Softwood Lumber Products from Canada 2004; Citrate Acid from China; Polyvinyl Alcohol from China (2003); see also Sinopec Sichuan Vinylon Works v. United States, 336 F. Supp. 2d 1339, 1346-47 (CIT 2005); Final Determination of Sales at Less Than Fair Value: Canned Pineapple Fruit From Thailand, 60 FR 29553 (June 5, 1995) (Pineapple Fruit From Thailand), at Comment 6; and Ipsco, Inc. v. United States, 965 F. 2d 1056 (Fed. Cir. 1992).
Commerce has accepted a number of cases where the value-based allocation methodology was used.\textsuperscript{31} Commerce did not use the value-based allocation methodology in circumstances where the methodology would raise “circularity” problems, where co-products were not entirely distinguishable, or where the methodology was not based on the respondent’s normal books and records.\textsuperscript{32} This is not the case here.

Traditionally, Commerce focused on the final stage of production (\textit{i.e.}, allocating cumene costs between acetone and phenol).\textsuperscript{33} The direct assignment of upstream input costs, propylene and benzene, raises many different issues and complexities.

The fact that inputs and outputs occurred in fixed proportions does not make the direct assignment methodology any more reliable or preferable. The direct assignment methodology is one option and there is no reason to impose it to LG Chem. Further, the statute does not instruct Commerce to search for the best possible methodology, or to replace a company’s normal cost allocation, or to pick among the different methodologies used by respondents in the case.

The issue of “circularity” arises when a respondent uses its own prices for the value-based allocation.\textsuperscript{34} Where the value-based allocation methodology is based on third party data, as in this case, the issue of “circularity” is absent.\textsuperscript{35} Moreover, there is no evidence that the prices of acetone fluctuated significantly during the period of investigation (POI). Thus, the potential distortions caused by “volatile prices” are not present in this case.

If Commerce believes that it cannot use LG Chem’s own value-based allocation methodology, Commerce’s method from the Preliminary Determination should be used because it retains the value-based allocation methodology that LG uses in the ordinary course of business while correcting the perceived distortions for using the non-market economy (NME) prices.

Thus, Commerce should not use the petitioner’s proposed alternative allocation methods, the direct assignment or volume-based allocation methodologies, for the final determination.

\textit{Petitioner’s Rebuttal Brief}

- Commerce repeatedly recognized that the value-based cost allocations are potentially distorting, even without the presence of any NME prices.\textsuperscript{36} The use of NME prices to

\textsuperscript{31} See Magnesium Metal from the Russian Federation: Final Results of Antidumping Duty Administrative Review, 73 FR 52642 (September 10, 2008) (Magnesium Metal from the Russia); see also Notice of Final Determination of Sales at Less Than Fair Value: Pure Magnesium from Israel, 66 FR 49349 (September 27, 2001) (Pure Magnesium from Israel); Citrate Acid from China; PSC VSMPO-Avisma Corp. v. United States; Softwood Lumber Products from Canada 2004; Polyvinyl Alcohol from China (2003); Pineapple Fruit From Thailand; Thai Pineapple v. United States, 187 F. 3d 1362, 1370 (Fed. Cir. 1999); Notice of Final Determination of Sales at Less Than Fair Value: Polyvinyl Alcohol From Taiwan, 61 FR 14064 (March 29, 1996) (Polyvinyl Alcohol From Taiwan), at Comment 8; and Polyvinyl Alcohol from China 2006.

\textsuperscript{32} See Frozen Raspberries from Chile 2007; see also Notice of Final Determination of Sales at Less Than Fair Value: Certain Preserved Mushrooms from India, 63 FR 72246 (December 31, 1998) (Mushrooms from India), at Comment 1.

\textsuperscript{33} See Magnesium Metal from the Russia.

\textsuperscript{34} See PSC VSMPO-Avisma Corp. v. United States; see also Softwood Lumber Products from Canada 2004.

\textsuperscript{35} See Raspberries from Chile 2007; see also Citrate Acid from China.

\textsuperscript{36} See Raspberries from Chile 2007; see also Softwood Lumber Products from Canada 2004; and Polyvinyl Alcohol from China (2003).
allocate costs would compound that distortion exponentially. LG Chem’s reported cost data are distorted and do not reasonably reflect the costs associated with producing the subject merchandise.37

- LG Chem provided no precedent where Commerce accepted the value-based cost allocation using NME prices and even where the value-based cost allocations are permitted in China cases, Commerce requires the use of surrogate market economy prices as the allocation drivers.38
- Chinese prices are distorted and unusable for the purposes of the antidumping analysis regardless of whether China is a large market and regardless of whether certain companies use the ICIS CMP prices as a reference.39
- The value-based cost allocations can be distorted when the prices used to allocate costs are “volatile.”40 In this case, the ICIS itself characterizes the China acetone market as “volatile.”41 Such distortions were mitigated by using the less volatile ICIS SE Asia price index in the Preliminary Determination.42 If Commerce continues to use the value-based cost allocation for the final determination, Commerce should use the ICIS SE Asia price index.
- There is no reason for Commerce to address LG Chem’s pre-preliminary comment for application of the quarterly costs because LG Chem did not present that argument in its case brief.43 However, if Commerce accepts LG Chem’s costs as reported based on the Chinese prices, at the very least, the quarterly cost methodology should not be used. The volatility of costs in this case was not in the cost of the primary input, i.e., cumene, but rather, in the Chinese acetone prices used to allocate those input costs.44 Further, the changes in acetone prices themselves caused the changes in input costs. Thus, the linkage relationship between changes in cost and changes in price was inverted.45

37 See section 773(f)(1)(A) of the Act.
38 See Polyvinyl Alcohol from China (2003); see also Citrate Acid from China.
40 See Frozen Raspberries from Chile 2007; see also Softwood Lumber Products from Canada 2004; and Polyvinyl Alcohol from China (2003).
43 See 19 CFR 351.309(c)(2).
45 See Circular Welded Steel Pipe from the UAE Prelim.
• Therefore, Commerce should use the direct assignment methodology, which avoids all inherent distortions from the value-based cost allocation.

Commerce’s Position:

Based on the unique particular facts of this investigation, where the primary joint production process raw material inputs can be traced to the joint products produced, we disagree with LG Chem that the value-based allocation methodology should be used to allocate the joint production costs between acetone and phenol.

LG Chem and KPB, the other respondent in this investigation, produce acetone from the cumene process where benzene is alkylated with propylene to form cumene which is then oxidized by air and decomposed into phenol and acetone. During the production process, the chemical reactions are such that the benzene portion of the cumene molecule becomes phenol and the propylene portion of the cumene molecule becomes acetone. Both respondents treat acetone and phenol as coproducts and allocate the joint production costs to acetone and phenol production. However, each respondent employs a different cost allocation methodology for its normal books and records. Specifically, LG Chem allocates the joint production costs using the relative corresponding NRV of each coproduct and the NRV of each coproduct was based on the ICIS CMP price index (i.e., value-based allocation methodology). On the other hand, KPB allocates the joint production costs to acetone based on a formula that incorporates both the purchase price of propylene and the quantity of propylene contained in the output acetone (i.e., the direct assignment methodology).

In accordance with section 773(f)(1)(A) of the Act, Commerce normally relies on data from a respondent’s normal books and records where those records are prepared in accordance with GAAP of the exporting country and reasonably reflect the costs associated with the production and sales of the merchandise. Normal GAAP accounting practices provide both respondents and Commerce with an objective and predictable basis by which to compute costs for the merchandise under investigation. However, in those instances where it is determined that a company’s normal books and records do not reasonably reflect the production costs of the merchandise under investigation, Commerce practice has been to adjust these costs as necessary. In the Preliminary Determination, Commerce found that LG Chem’s reported costs did not reasonably reflect the cost associated with the production and sales of acetone because the joint cost allocation factors were based on non-market economy prices. Consequently, Commerce reallocated LG Chem’s joint costs to acetone and phenol based on the relative NRV

---

46 See LG Chem’s April 26, 2019 Section A Response at 32; see also KPB’s April 25, 2019 Section A Response at A-24.
47 See LG Chem’s April 26, 2019 Section A Response at 32; see also KPB’s SSDR at SD-14; and KPB Cost Verification Report at 12.
49 See KPB’s SSDR at SD-14, see also KPB Cost Verification Report at 14.
50 See Ferrovanadium from the Republic of Korea: Final Determination of Sales at Less than Fair Value, 82 FR 14874 (March 23, 2017), and accompanying IDM at Comment 8; see also Mushrooms from India; and Polyvinyl Alcohol from China 2003.
51 See LG Chem’s Preliminary Cost Calculation Memo.
of each coproduct using the ICIS SE Asia price index in lieu of the ICIS CMP price index.\textsuperscript{52} Thus, while Commerce accepted LG Chem’s value-based allocation methodology for the \textit{Preliminary Determination}, for the final determination we reevaluated whether it is appropriate to use the value-based allocation methodology for LG Chem considering specific facts surrounding this investigation.

As Commerce has acknowledged in a number of proceedings, a value-based allocation methodology can be problematic in an antidumping context.\textsuperscript{53} The most obvious problem is the potential circularity of the calculation, whereby prices are used to determine the product-specific costs which in turn are either compared to those same prices or are used to construct prices (\textit{i.e.}, through the sales-below-cost test and constructed value). Other market factors may also create problems with using prices as a basis of allocation, such as volatile market prices, temporary surges in supply and demand, and specific market preferences for specific products. In addition, the statute directs Commerce to determine the actual cost to produce the merchandise under consideration and establishes that cost as a floor for the comparison prices. Thus, the use of a value-based cost allocation methodology is appropriate in an antidumping context in limited instances and often is used as a method of last resort.\textsuperscript{54} Because of the specific facts of this investigation, as discussed below, we find that the use of a value-based allocation methodology is inappropriate in this situation.

While we agree with LG Chem that Commerce has accepted a value-based allocation in a number of previous determinations involving joint products, Commerce accepted the value-based allocation in those situations as a last resort because using an alternative methodology such as a volume-based or a direct assignment allocations were either not possible or would lead to an unreasonable result.\textsuperscript{55} For example, Commerce stated in \textit{Softwood Lumber Products from Canada 2004} that “we believe that a volume-based cost allocation for wood and sawmill costs distorts the actual cost of individual product, because it does not account for the various grades of wood in the logs and the resulting products produced by the sawmill.” Also, in \textit{Polyvinyl Alcohol from Taiwan}, Commerce stated that “the allocation of costs equally to each kilogram produced results in an unreasonable division of joint production costs between PVA and acetic acid.” Furthermore, none of the determinations where Commerce accepted the value-based allocation methodology had the same fact pattern as in this investigation, where the inputs consumed in the joint production process can be clearly traceable to specific-output coproducts.\textsuperscript{56} The National Association of Accountants (NAA) define joint products as two or more products that are so related that one cannot be produced without producing the other(s), each having relative substantial value and being produced simultaneously by the same process up to a split-

\textsuperscript{52} Id.
\textsuperscript{53} See \textit{Frozen Raspberries from Chile 2007}; see also \textit{Softwood Lumber products from Canada 2002}; \textit{Softwood Lumber products from Canada 2004}; and \textit{Citrate Acid from China}.
\textsuperscript{54} Id.
\textsuperscript{55} See \textit{Softwood Lumber products from Canada 2002}; see also \textit{Softwood Lumber products from Canada 2004}; and \textit{Citrate Acid from China}.
\textsuperscript{56} See \textit{Magnesium Metal from the Russia}; \textit{Pure Magnesium from Israel}; see also \textit{Citrate Acid from China}; \textit{PSC VSMPO-Avisma Corp. v. United States}; \textit{Softwood Lumber Products from Canada 2004}; \textit{Polyvinyl Alcohol from China (2003)}; \textit{Pineapple Fruit from Thailand}; \textit{Thai Pineapple v. United States}; \textit{Polyvinyl Alcohol from Taiwan}; and \textit{Polyvinyl Alcohol from China 2006}. 
off point. This investigation presents a specific situation where the particular raw material inputs can be precisely traceable to the specific coproducts produced. Specifically, acetone and phenol are produced from the same joint production process where the chemical reactions are such that the benzene portion of the cumene molecule becomes phenol and the propylene portion of the cumene molecule becomes acetone through the purification process. Consequently, the specific molecules contained in cumene, (i.e., benzene and propylene) can be directly traceable to the specific products produced, phenol and acetone.

We also disagree with LG Chem that the “circularity” issue of the value-based allocation is totally absent from this situation because it used a third-party price index for the NRV allocation. According to LG Chem, a significant portion of its U.S. sale prices were based on the same third-party price index. Thus, the NRV that was used to determine the product-specific cost of acetone was in turn compared to those same product-specific prices or was used to determine prices (i.e., through the sales-below-cost test and constructed value). Furthermore, we disagree with LG Chem that there is no evidence that the prices of acetone fluctuated significantly during the POI and thus, the potential distortions caused by “volatile prices” are not present in this case. LG Chem specifically stated in its submission that the international price of acetone sharply changed during the POI. LG Chem also stated that the POI market price of acetone changed more sharply than its coproduct which affected the NRV used in the calculation of the cost of acetone. Thus, the record clearly shows significant fluctuation of acetone prices during the POI. While replacing the ICIS CMP price index with the SE Asia price index mitigates the distortion in LG Chem’s reported costs, the potential problems inherent in the value-based allocation methodology still are not eliminated. As such, for all the reasons stated above, Commerce finds that it is distortive and unreasonable to rely on the value-based allocation methodology used in LG Chem’s normal books and records, particularly when the production process in this case allows for an accurate tracing of input raw materials to the output finished products (i.e., direct assignment methodology).

To apply a direct assignment methodology to LG Chem, Commerce relied on the direct assignment cost calculation method used by KPB. Specifically, KPB determined the cost of acetone using a formula that incorporates the cost of the propylene input (i.e., the component of cumene that eventually becomes acetone) and the quantity of propylene contained in the unit of acetone. Under this approach, propylene costs are assigned to acetone, whereas benzene costs are assigned to phenol. We find KPB’s formula reasonable because it recognizes the actual chemical reactions associated with acetone production, the relative quantity and value of propylene contained in acetone, and the relative production quantity of acetone during the POI. Finally, we agree with the petitioner that LG Chem’s quarterly cost issue is moot since LG Chem did not present that argument in its case brief. Accordingly, we recalculated LG Chem’s joint

---

57 See Fresh Garlic from the People’s Republic of China: Final Results of Antidumping Duty Administrative Review; 2010-2011, 78 FR 36168 (June 17, 2013), and accompanying IDM at Comment 14.
58 See LG Chem’s Case Brief at 7.
59 See LG Chem’s July 9, 2019 Supplemental Section D response at 5-7 and Exhibit SD-5.
60 Id.
62 See KPB’s June 5, 2019 Section D Response at Exhibit D-9.
cost allocation of production costs to acetone and phenol using the direct assignment methodology for the final determination.

Comment 2: KPB’s Cost Allocation Method

KBP’s Case Brief

- To allocate joint phenol and acetone costs between phenol and acetone, KPB used a ratio of the relative material input costs (propylene and benzene), i.e., the method used in its normal accounting books and records. The other respondent in this investigation, LG Chem, on the other hand, allocated joint costs using the NRV methodology which resulted in a different per-unit cost for acetone.
- Commerce should analyze which allocation method “reasonably reflects the costs associated with the production and sales of merchandise” as dictated by the statute and apply the same allocation method to both respondents. Otherwise, the fairness of this investigation will be significantly impaired by resulting in different costs, for no reason other than an academic exercise, whereby joint phenol and acetone costs are segregated into the phenol and acetone baskets.
- For Commerce’s reference, KPB provides in its case brief, cost of manufacture (COM) information based on an NRV method. With this change, applying the NRV method to both respondents will achieve more equitable and consistent calculations.
- Commerce in other AD cases has recognized the importance of achieving consistency in allocation methods for cases involving joint co-products, in particular, with respect to the use of the NRV method. In Softwood Lumber from Canada, Commerce followed its practice of calculating the respondents’ costs using an NRV method rather than the respondents’ costs as maintained in their normal books and records, thus ensuring consistency and accuracy among the respondents.63
- In Canned Pineapple Fruit from Thailand, Commerce similarly adopted an NRV method in order to allocate pineapple fruit costs to joint products resulting from the production process.64 In fact, in certain segments of that proceeding Commerce instructed the respondent companies to adopt an NRV-based method for joint cost allocations in order to ensure consistency across the companies.65
- Commerce should adjust KPB’s costs using the NRV method to ensure that no distortions exist in the AD calculations in this investigation across respondents. In this manner, Commerce will reflect the same rational method of distribution using a consistent method that can reasonably adjust the allocation differences among the two co-products.

---

63 See KPB’s Case Brief at 7 and 8 (citing Softwood Lumber Products from Canada 2004 IDM at Comment 3).
64 See KPB’s Case Brief at 8 (citing Notice of Preliminary Results and Preliminary Determination to Revoke Order in Part: Canned Pineapple Fruit from Thailand, 69 FR 18524, 18526-27 (April 18, 2004), unchanged in Notice of Final Results of Antidumping Duty Administrative Review and Final Determination to Revoke Order in Part: Canned Pineapple Fruit from Thailand, 69 FR 50164 (August 13, 2004), and accompanying IDM).
65 See KPB’s Case Brief at 8 (citing Notice of Preliminary Results, Partial Rescission of Antidumping Duty Administrative Review and Preliminary Determination to Revoke Order in Part: Canned Pineapple Fruit from Thailand, 67 FR 51171, 51174 (Aug. 7, 2002)).
Petitioner’s Rebuttal Brief

- The petitioner agrees that a consistent cost allocation methodology should be applied to both respondents, therefore, as explained in petitioner’s case brief, Commerce should recalculate LGC’s acetone costs using the same methodology as that employed by KPB.66
- It is typical in the industry that benchmark prices for acetone are tied to propylene costs, whereas benchmark prices for phenol are tied to benzene costs.67 KPB employed a methodology consistent with the industry standard, which recognizes that acetone is derived from the propylene portion (and phenol from the benzene portion) of the cumene molecule.68
- Recalculating KPB’s costs based on LGC’s methodology, i.e. allocating total cumene costs between acetone and phenol based on the relative sales values of those co-products would be improper, because: 1) value-based cost allocations are disfavored in the antidumping law; 2) the methodology used by LGC in this case is particularly distortive; 3) the direct assignment method avoids such distortion and represents a superior approach; and, 4) KPB’s cost accounting methodology, not LGC’s, is consistent with the industry standard.
- Accordingly, Commerce should recalculate LGC’s costs using KPB’s methodology, rather than the other way around.

Commerce’s Position:

Commerce’s long-standing practice codified at section 773(f)(1)(A) of the Act, is to rely on a company’s normal books and records if such records are in accordance with home country generally accepted accounting principles (GAAP) and reasonably reflect the costs associated with production and sale of the merchandise. Here, the record is clear, and the parties do not dispute the fact that the reported costs are derived from KPB’s normal books and records, and that those books and records are kept in accordance with Korean GAAP. Hence, the question facing Commerce is whether the per-unit costs from KPB’s normal books reasonably reflect the cost to produce and sell acetone.

The main raw material consumed in the production of the joint products acetone and phenol is cumene. In turn, the main raw materials consumed in the production of cumene are benzene and propylene. In its normal books and records, KPB allocates cumene costs to acetone based on a formula that incorporates the purchase cost of propylene and the quantity of propylene contained in the acetone produced. According to KPB, the rationale behind their normal cost allocation methodology is that it is consistent with the chemical composition of both acetone and phenol: “Although propylene and benzene are added to produce the semi-finished product cumene, which is later separated into acetone and phenol, the chemical decomposition of acetone consists

66 See Petitioner’s Rebuttal Brief at 1.
67 See Petitioner’s Rebuttal Brief (citing Petition at17 (“Specifically, benchmark prices of phenol are based on the contained benzene, and benchmark prices of acetone are based on the contained propylene found in the final product. This practice reflects the chemical reality that most of the components of the propylene used as an input for cumene end up in the acetone, while the benzene molecules ultimately end up in the phenol.”)); and id. at 21, n. 52 (regarding the formulas used to set acetone prices in typical long-term contracts).
68 See Petitioners Rebuttal Brief (citing KPB’s June 5, 2019 Section D Response at D-15; and KPB’s SSDR at SD-14); see also KPB Cost Verification Report at 12 and 14.
only of propylene. When phenol is chemically decomposed, it is composed solely of benzene. Therefore, the cost of acetone is determined by the purchase price and composition ratio only of propylene.\textsuperscript{69}

We disagree with KPB that Commerce should use the NRV allocation method proposed by LG Chem in order to rely on an appropriate and consistent allocation of joint costs for both respondents. The standard is to rely on a company’s normal books and records unless it unreasonably allocates costs. KPB’s normal books and records allocate costs to acetone using a formula that incorporates both the cost of the propylene input (\textit{i.e.}, the component of cumene that eventually becomes acetone) and the quantity of propylene contained in a unit of acetone. Under this approach, propylene costs are assigned to acetone and benzene costs are assigned to phenol. We find that KPB’s normal books and records are reasonable because they recognize the actual chemical reactions associated with acetone production, the relative quantity and value of propylene contained in acetone, and the relative production quantity of acetone during the POI. As we deem KPB’s normal allocation method reasonable, it is not necessary to analyze whether the proposed alternative NRV allocation method is reasonable or not.

Therefore, for the final determination, we have continued to use KPB’s joint costs allocation method based on direct traceability of material inputs, because we consider such allocation method reasonable and do not see a reason to deviate from the company’s normal books and records.

**Comment 3: KPB’s Purchases from Affiliates**

\textit{KPB’s Case Brief}
- KPB purchased two types of a proprietary input (\textit{i.e.}, type A and type B for a public discussion) from its parent company Kumho Petrochemical Co., Ltd. (KKPC). For the preliminary determination, Commerce adjusted the cost of the type B input to reflect the market value of the input.
- While KPB does not challenge the above adjustment, it disagrees with Commerce’s suggestion that the cost of the type A input should also be adjusted based on the ratio between the market value to the affiliated transfer price of the type B input as proposed by Commerce because KPB did not provide a market price for the type A input.
- KPB did not provide a market price because it did not purchase the type A input from unaffiliated suppliers. However, KPB did provide the cost of production (COP) information showing that the transfer price for the type A input exceeds its COP.
- Moreover, KPB’s purchase price from KKPC for the input type A exceeded KKPC’s prices to unaffiliated customers for the type B input, thus providing further evidence that purchases of the type A input from KKPC were at arm’s length.
- There is no basis to support that the adjustment proposed by Commerce is a more accurate or reliable measure than, for example, another methodology such as KKPC’s relative costs of production of the two types of this input.

No other party commented on this issue.

\textsuperscript{69} See KPB’s SSDR at SD-14.
Commerce’s Position:

As noted by KPB, the company purchased two types of an input (i.e., types A and B) used in the production of acetone from an affiliated supplier, KKPC. For the final determination, we analyzed the transfer prices for these inputs according to section 773(f)(2) of the Act. In so doing, we compared the average transfer price paid to its affiliated supplier for input type B to the average price paid to unaffiliated suppliers for the same input. Since the average market price exceeded the average transfer price, we are adjusting the cost of the type B input to reflect the higher market value. However, the same analysis cannot be done for the type A input since KPB did not provide a market price value for such input (i.e., they did not purchase that input from unaffiliated suppliers, and its affiliate KKPC did not sell it to unaffiliated customers). Because a market price is not available for input type A and because both the type A input and the type B input were purchased from the same affiliated supplier, we consider it reasonable to apply the results of our testing of input type B to the affiliated purchases of input type A.

Therefore, in accordance with section 773(f)(2) of the Act, for the final determination we have adjusted the transfer price of the type A input based on the results of our testing of the transfer price to market for input type B.

Comment 4: LG Chem’s Non-Operating Expenses

LG Chem’s Case Brief

- In the preliminary determination, Commerce included certain non-operating losses in the general and administrative expense (G&A) ratio calculation. The included non-operating losses were related to LG Chem’s investment activities and these losses should be excluded from the G&A expense ratio calculation.70
- Including investment items in the G&A expense ratio calculation is inconsistent with Commerce’s practice. Commerce only includes items that are associated with the general operation of the company in the G&A expense ratio calculation.71

Petitioner did not comment on this issue.

Commerce’s Position:

We agree with LG Chem and have adjusted LG Chem’s G&A expense ratio to exclude the impairment losses from investment assets. In the preliminary determination, Commerce revised

70 See LG Chem Cost Verification Report at 23.
71 See Polyester Staple Fiber from Korea: Final Results of Antidumping Duty Administrative Review, 67 FR 63616 (October 15, 2002), and accompanying IDM at Comment 15; see also Notice of Final Determination of Sales at Less Than Fair Value: Certain Cold-Rolled Carbon Steel Flat Products From Taiwan, 67 FR 62104 (October 3, 2002), and accompanying IDM at Comment 6; see also Stainless Steel Wire Rod from the Republic of Korea: Final Results of Antidumping Duty Administrative Review, 69 FR 19153 (April 12, 2004), and accompanying IDM at Comment 8; and Certain Small Diameter Carbon and Alloy Seamless Standard, Line, and Pressure Pipe from Romania: Final Results of Antidumping Duty Administrative Review and Final Determination Not to Revoke Order in Part, 70 FR 7239 (February 11, 2005), and accompanying IDM at Comment 2.
LG Chem’s reported G&A expense ratio to include an amount for “losses on impairment of other assets.” At verification, LG Chem provided documents demonstrating that these losses were comprised of the impairment losses on investment in an affiliated company.\(^7\) It is Commerce’s well-established practice to exclude investment gains and losses from the reported costs because investment activity is not related to the general production operations of the company, but, rather, is a separate profit making activity.\(^7\) Therefore, for the final determination, we have excluded the investment assets related impairment losses, from the G&A expense ratio.

**Comment 5: LG Chem’s G&A Expense Ratio Calculation**

**LG Chem’s Case Brief**
- In this proceeding, LG Chem submitted two different G&A expense ratio calculations (i.e., division-specific and company-wide) and Commerce used the company-wide G&A expense ratio for the preliminary determination.
- Each division operates fundamentally different businesses and in the ordinary course of business, LG Chem tracks the G&A expenses based on each division.
- Section 773(b)(2)(3) of the Act provides that any G&A included in cost of production be based on the “production and sales of the foreign like product” under investigation. Thus, the statute focuses on the “foreign like product” and not overall production operations. This statutory guidance is particularly important when dealing with large diversified companies producing many different products. Therefore, using the division-specific G&A expense ratio better reflects the statutory requirement and is more appropriate.
- Because: 1) LG Chem is a large and diversified chemical manufacturer, 2) the general expenses of manufacturing a basic chemical like acetone are different from LG Chem’s other businesses, 3) most of the G&A expenses are not allocated, but rather separately tracked by division, 4) LG Chem uses this allocation system in the ordinary course of business, and 5) the divisional G&A expenses more closely represent the general expenses of producing acetone, Commerce should use the division-specific G&A expense ratio for the final determination.

**Petitioner’s Rebuttal Brief**
- There are many cases in which Commerce has explained why G&A expense should be calculated on a company-wide basis, even where the respondent is able to report G&A expense on a divisional or product-line basis.\(^7\)

\(^7\) See LG Chem Cost Verification Report at 23.

\(^7\) See Notice of Final Results of Antidumping Duty Administrative Review and Final Determination to Revoke the Order in Part: Individually Quick Frozen Red Raspberries from Chile, 72 FR 6524 (February 12, 2007), and accompanying IDM at Comment 6; see also Certain Corrosion-Resistant Carbon Steel Flat Products from the Republic of Korea: Notice of Final Results of the Sixteenth Administrative Review, 76 FR 15291 (March 21, 2011), and accompanying IDM at Comment 14; and Dioctyl Terephthalate From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Negative Determination of Critical Circumstances, 82 FR 28824 (June 26, 2017), and accompanying IDM at Comment 10.

\(^7\) See Silicon Metal From Norway: Affirmative Final Determination of Sales at Less Than Fair Value, Final Determination of No Sales, and Final Negative Determination of Critical Circumstances, 83 FR 9829 (March 8, 2018) (Silicon Metal from Norway), and accompanying IDM at Comment 3; see also Certain Cold-Drawn
• In other proceedings involving LG Chem, Commerce calculated LG Chem’s G&A expense on a company-wide basis.\(^75\) Therefore, Commerce should continue to calculate LG Chem’s G&A expenses on a company-wide basis.

**Commerce’s Position:**

We agree with the petitioner and have continued to calculate LG Chem’s G&A expenses on a company-wide basis. Section 773(b)(3)(B) of the Act provides that, for purposes of calculating cost of production (COP), Commerce shall include “an amount for selling, general and administrative (SG&A) expenses based on actual data pertaining to the production and sales of the foreign like product by the exporter in question.” The law does not prescribe a specific methodology for calculating the G&A expenses. Where the statute is silent or ambiguous on a specific issue, the determination of a reasonable and appropriate method is left to the discretion of Commerce. Because there is no bright-line definition in the Act of what constitutes G&A expenses or precisely how to calculate a G&A expense rate, Commerce has developed a consistent and predictable approach to calculating and allocating G&A expenses. This methodology is to calculate the rate based on the company-wide G&A costs incurred by the producing company allocated over the producing company’s company-wide cost of sales, and not on a consolidated, divisional, or product-specific basis.\(^76\) In addition to being consistent and predictable, we believe this methodology is a reasonable application of the statute that discourages “results-oriented” approaches to calculating G&A expenses. Further, our practice with respect to G&A expenses is reflected in Commerce’s standard cost questionnaire, which instructs that the G&A expense rate should be calculated as the ratio of total company-wide G&A expenses divided by total company-wide cost of goods sold.

In calculating the G&A expense ratio, Commerce normally includes those expenses and revenues that relate to the general operations of the company as a whole and to the accounting period, as opposed to including only those expenses that directly relate to the production of the merchandise. The CIT has agreed with Commerce that G&A expenses are those expenses which relate to the general operations of the company as a whole, rather than to the production process.\(^77\) LG Chem’s proposed approach attempts to make general expenses product-specific, by excluding certain general expenses which it claims are not related to the subject...
merchandise. However, the expenses at issue that LG Chem proposes to exclude from the ratio are all classified as general expenses (i.e., G&A and non-operating expenses) in LG Chem’s audited company-wide financial statements, and as such are not specific to a business segment, division or production line. If expenses are directly related to a particular production process or product, they would be classified as manufacturing costs in the audited financial statements. By contrast, G&A expenses by their nature are indirect expenses incurred by the company as a whole, and are not directly related to a process or product. Therefore, consistent with our practice, we have continued to include company-wide G&A expenses as recorded on the company-wide financial statements in the G&A expense ratio and have allocated them over the company-wide cost of sales.

VI. RECOMMENDATION

Based on our analysis of the comments received, we recommend adopting the above positions. If this recommendation is accepted, we will publish the final determination in the investigation and the final estimated weighted-average dumping margins in the Federal Register.

☐ ☒

Agree Disagree

2/6/2020

Signed by: JEFFREY KESSLER
Jeffrey I. Kessler
Assistant Secretary
for Enforcement and Compliance

---

78 See LG Chem’s June 6, 2019 Section D Questionnaire Response at Exhibit D-12.
79 See LG Chem’s April 26, 2019 Section A Response at Exhibit A-21.
80 See Notice of Final Determination of Sales at Less Than Fair Value: Hot-Rolled Flat-Rolled Carbon-Quality Steel Products from Japan, 64 FR 24329, 24354 (May 6, 1999), and accompanying IDM at Comment 25; see also Certain Lined Paper Products from India: Notice of Final Results of the First Antidumping Duty Administrative Review, 74 FR 17149 (April 14, 2009).