

U.S. PRODUCERS' QUESTIONNAIRE

HYDROFLUOROCARBON BLENDS AND COMPONENTS FROM CHINA

This questionnaire must be received by the Commission by **WEDNESDAY, APRIL 28, 2016**.

See last page for filing instructions.

The information called for in this questionnaire is for use by the United States International Trade Commission in connection with its antidumping investigation concerning hydrofluorocarbon blends and components from China (inv. No. 731-TA-1279 (Final)). The information requested in the questionnaire is requested under the authority of the Tariff Act of 1930, title VII. This report is mandatory and failure to reply as directed can result in a subpoena or other order to compel the submission of records or information in your firm's possession (19 U.S.C. § 1333(a)).

Name of firm _____	
Address _____	
City _____	State _____ Zip Code _____
Website _____	
1. Has your firm produced or reclaimed any in-scope HFC components R-32, R-125, or R-143a, out-of-scope HFC component R-134a, or any in-scope HFC blends R-404A, R-407A, R-407C, R-410A, and R-507A at any time since January 1, 2013?	
<input type="checkbox"/> YES (Complete all parts of the questionnaire, and return the entire questionnaire to the Commission)	
<input type="checkbox"/> NO (Proceed to question 2)	
2. Has your firm produced and/or reclaimed any out-of-scope refrigerant blend (see pp. 2-3 for definitions) since January 1, 2013?	
<input type="checkbox"/> YES-- (Only complete parts I and V on pp. 6-9 and 62-76 of this questionnaire)	
<input type="checkbox"/> NO-- (Sign the certification below and promptly return only this page of the questionnaire to the Commission)	
3. Data reported in this questionnaire relate to the production of (check all that apply):	
<input type="checkbox"/> HFC components	<input type="checkbox"/> In-scope HFC blends
<input type="checkbox"/> Reclaimed/reconstituted in-scope HFC blends	<input type="checkbox"/> Out-of-scope refrigerant blends
Return questionnaire via the U.S. International Trade Commission <i>Drop Box</i> by clicking on the following link: https://dropbox.usitc.gov/oinv/. (PIN: 1279)	

CERTIFICATION

I certify that the information herein supplied in response to this questionnaire is complete and correct to the best of my knowledge and belief and understand that the information submitted is subject to audit and verification by the Commission. By means of this certification I also grant consent for the Commission, and its employees and contract personnel, to use the information provided in this questionnaire and throughout this proceeding in any other import-injury proceedings conducted by the Commission on the same or similar merchandise.

I acknowledge that information submitted in this questionnaire response and throughout this proceeding may be used by the Commission, its employees, and contract personnel who are acting in the capacity of Commission employees, for developing or maintaining the records of this proceeding or related proceedings for which this information is submitted, or in internal audits and proceedings relating to the programs and operations of the Commission pursuant to 5 U.S.C. Appendix 3. I understand that all contract personnel will sign non-disclosure agreements.

Name of Authorized Official

Title of Authorized Official

Date

Phone:

Signature

Email address

PART I.--GENERAL INFORMATION

Background.--This proceeding was instituted in response to a petition filed on June 25, 2015, by The American HFC Coalition and its members (Amtrol, Inc., West Warwick, Rhode Island; Arkema, Inc., King of Prussia, Pennsylvania; The Chemours Company FC LLC, Wilmington, Delaware; Honeywell International Inc., Morristown, New Jersey; Hudson Technologies, Pearl River, New York; Mexichem Fluor Inc., St. Gabriel, Louisiana; Worthington Industries, Inc., Columbus, Ohio) and District Lodge 154 of the International Association of Machinists and Aerospace Workers. Antidumping duties may be assessed on the subject imports as a result of this proceeding if the Commission makes an affirmative determination of injury, threat, or material retardation, and if the U.S. Department of Commerce makes an affirmative determination of dumping. Questionnaires and other information pertinent to this proceeding are available at:

https://www.usitc.gov/investigations/701731/2016/hydrofluorocarbon_blends_and_components_china/final.htm

Certain hydrofluorocarbon blends and components: The products covered by these investigations are blended hydrofluorocarbons (“HFCs”) and single HFC components of those blends thereof, whether or not imported for blending, including the following:

HFC components covered by the scope of this investigation:

(1) R-32 or “Difluoromethane” has the chemical formula CH_2F_2 , and is registered as CAS No. 75-10-5. It may also be known as HFC-32, FC-32, Freon-32, Methylene difluoride, Methylene fluoride, Carbon fluoride hydride, halocarbon R32, fluorocarbon R32, and UN 3252.

R-32 is sold under various trade names, including Solkane[®]32, Forane[®]32, and Klea[®]32.

(2) R-125 or “1,1,1,2,2-Pentafluoroethane” has the chemical formula CF_3CHF_2 and is registered as CAS No. 354-33-6. R-125 may also be known as HFC-125, Pentafluoroethane, Freon 125, and Fc-125.

R-125 is sold under various trade names, including Solkane[®]125, Klea[®]125, Genetron[®]125, and Forane[®]125.

(3) R-143a or “1,1,1-Trifluoroethane” has the chemical formula CF_3CH_3 and is registered as CAS No. 420-46-2. R-143a may also be known as HFC-143a, Methylfluoroform, 1,1,1-Trifluoroform, and UN2035.

R-143a is sold under various trade names, including Solkane[®]143a, Genetron[®]143a, and Forane[®]125.

HFC blends covered by the scope of this investigation:

(1) R-404A: a zeotropic mixture consisting of 52 percent R-143a, 44 percent by weight R-125, and 4 percent 1,1,1,2-Tetrafluoroethane (“R-134a”).

R-404A is sold under various trade names, including Forane® 404A, Genetron® 404A, Solkane® 404A, Klea® 404A, and Suva®404A.

(2) R-407A: a zeotropic mixture of 20 percent R-32, 40 percent R-125, and 40 percent R-134a.

R-407A is sold under various trade names, including Forane® 407A, Solkane® 407A, Klea®407A, and Suva®407A.

(3) R-407C: a zeotropic mixture of 23 percent R-32, 25 percent R-125, and 52 percent R-134a.

R-407C is sold under various trade names, including Forane® 407C, Genetron® 407C, Solkane® 407C, Klea® 407C and Suva® 407C.

(4) R-410A: a zeotropic mixture of 50 percent R-32 and 50 percent R-125.

R-410A is sold under various trade names, including EcoFluor R410, Forane® 410A, Genetron® R410A and AZ-20, Solkane® 410A, Klea® 410A, Suva® 410A, and Puron®.

(5) R-507A: an azeotropic mixture of 50 percent R-125 and 50 percent R-143a also known as R-507.

R-507A is sold under various trade names, including Forane® 507, Solkane® 507, Klea®507, Genetron®AZ-50, and Suva®507.

The foregoing percentages are nominal percentages by weight. Actual percentages of single component refrigerants by weight may vary by plus or minus two percent points from the nominal percentage identified above.

Products excluded from the scope of this investigation:

Excluded from this investigation are:

(1) Blends of refrigerant chemicals that include products other than HFCs, such as blends including chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs).

(2) Patented HFC blends, such as ISCEON® blends, including MO99™ (RR-438A), MO79 (R-422A), MO59 (R-417A), MO49Plus™ (R-437A) and MO29™ (R-422D), and Genetron® Performax™ LT (R-407F), Choice® R-421A, and Choice® R-421B.

(3) HFC component R-134a.

HFC blends included in the scope of this investigation are currently classified in the Harmonized Tariff Schedule of the United States (“HTS”) in statistical reporting numbers 3824.78.0020 and 3824.78.0050.¹ Single component HFCs included in the scope of this investigation are currently classified in statistical reporting number 2903.39.2035.² Although the HTSUS statistical reporting numbers and CAS registry numbers are provided for convenience and customs purposes, the written description of the scope is dispositive.

Practical terminology for products in this questionnaire

Components

- **In-scope HFC components** = three (3) components, R-32, R-125, and R-143a.
- **Out-of-scope HFC component** = one (1) component, R-134a.³
- **HFC components** = four (4) components, R-32, R-125, R-143a, and R-134a.

Blends

- **In-scope HFC blends** = five (5) blends, R-404A, R-407A, R-407C, R-410A, and R-507A.
- **Out-of-scope refrigerant blends** = any blend that uses at least one in-scope HFC component and is not part of the 5 "in-scope HFC blends" listed above. These include all other refrigerant blends, including HFC, HCFC, and HFO blends. This includes proprietary and patented refrigerant blends. See question V-5 for a list of various out-of-scope refrigerant blends.

Producer.--If your firm produces HFC components R-32, R-125, R-143a, or R-134a, HFC blends R-404A, R-407A, R-407C, R-410A, or R-507A, you are considered a “producer” in this investigation.

Reclaimer.--If your firm removes impurities from any in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) through reclaiming, reconstituting, and/or recycling in order to produce the in-scope HFC blends by bringing these blends back to AHRI standards for customers, you must complete a producer questionnaire.

Repackers.--If your firm has both blending and repacking operations, please report your blending operations only.

Reporting of information.-- If information is not readily available from your records, provide carefully prepared estimates. If your firm is completing more than one questionnaire (i.e., a producer, importer, and/or purchaser questionnaire), you need not respond to duplicated questions.

Confidentiality.--The commercial and financial data furnished in response to this questionnaire that reveal the individual operations of your firm will be treated as confidential by the Commission to the extent that such data are not otherwise available to the public and will not be disclosed except as may be required by law (see 19 U.S.C. § 1677f). Such confidential information will not be published in a manner that will reveal the individual operations of your firm; however, general characterizations of numerical business proprietary information (such as discussion of trends) will be treated as confidential business information only at the request of the submitter for good cause shown.

¹ Prior to 2016, HFC blends were classified in HTS statistical reporting number 3824.78.0000.

² Prior to 2016, single component HFCs were classified in HTS statistical reporting number 2903.39.2030.

³ With the exception of questions in sections II-4a and II-4 on your firm’s ability to shift from within scope to out-of-scope components and blends, discussion and data for out-of-scope HFC component refer only to R-134a.

Verification.--The information submitted in this questionnaire is subject to audit and verification by the Commission. To facilitate possible verification of data, please keep all files, worksheets, and supporting documents used in the preparation of the questionnaire response. Please also retain a copy of the final document that you submit.

Release of information.--The information provided by your firm in response to this questionnaire, as well as any other business proprietary information submitted by your firm to the Commission in connection with this proceeding, may become subject to, and released under, the administrative protective order provisions of the Tariff Act of 1930 (19 U.S.C. § 1677f) and section 207.7 of the Commission's Rules of Practice and Procedure (19 CFR § 207.7). This means that certain lawyers and other authorized individuals may temporarily be given access to the information for use in connection with this proceeding or other import-injury proceedings conducted by the Commission on the same or similar merchandise; those individuals would be subject to severe penalties if the information were divulged to unauthorized individuals. In addition, if your firm is a U.S. producer, the information you provide on your production and imports of HFC blends and components and your responses to the questions in Part I of the producer questionnaire will be provided to the U.S. Department of Commerce, upon its request, for use in connection with (and only in connection with) its requirement pursuant to section 702(c)(4)/732(c)(4) of the Act (19 U.S.C. § 1671a(c)(4)/1673a(c)(4)) to make a determination concerning the extent of industry support for the petition requesting this proceeding. Any information provided to Commerce will be transmitted under the confidentiality and release guidelines set forth above. Your response to these questions constitutes your consent that such information be provided to Commerce under the conditions described above.

I-1a. **OMB statistics.**--Please report below the actual number of hours required and the cost to your firm of completing this questionnaire.

Hours	Dollars

The questions in this questionnaire have been reviewed with market participants to ensure that issues of concern are adequately addressed and that data requests are sufficient, meaningful, and as limited as possible. Public reporting burden for this questionnaire is estimated to average 50 hours per response, including the time for reviewing instructions, gathering data, and completing and reviewing the questionnaire.

We welcome comments regarding the accuracy of this burden estimate, suggestions for reducing the burden, and any suggestions for improving this questionnaire. Please attach such comments to your response or send to the Office of Investigations, USITC, 500 E St. SW, Washington, DC 20436.

I-1b. **TAA information release.**--In the event that the U.S. International Trade Commission (USITC) makes an affirmative final determination in this proceeding, do you consent to the USITC's release of your contact information (company name, address, contact person, telephone number, email address) appearing on the front page of this questionnaire to the Departments of Commerce, Labor, and Agriculture, as applicable, so that your firm and its workers can be made eligible for benefits under the Trade Adjustment Assistance program?

Yes No

I-2. **Establishments covered.**--Provide the city, state, zip code, and brief description of each establishment covered by this questionnaire. If your firm is publicly traded, please specify the stock exchange and trading symbol in the footnote to the table. **Firms operating more than one establishment should combine the data for all establishments into a single report.**

"Establishment"--Each facility of a firm involved in the production of HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A), including auxiliary facilities operated in conjunction with (whether or not physically separate from) such facilities.

Establishments covered ¹	City, State	Zip (5 digit)	Description
1			
2			
3			
4			
5			
6			

¹ Additional discussion on establishments consolidated in this questionnaire: _____.

I-3. **Petition support.**--Does your firm support or oppose the petition?

Country	Support	Oppose	Take no position
China	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I-4. **Ownership.**--Is your firm owned, in whole or in part, by any other firm?

No Yes--List the following information.

Firm name	Address	Extent of ownership (percent)

I-5. **Related importers/exporters.**--Does your firm have any related firms, either domestic or foreign, that are engaged in importing HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) from China into the United States or that are engaged in exporting HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) from China to the United States?

No Yes--List the following information.

Firm name	Address	Affiliation

I-6. **Related producers.**--Does your firm have any related firms, either domestic or foreign, that are engaged in the production of in-scope HFC blends or HFC components?

No Yes--List the following information.

Firm name	Address	Affiliation

I-7. **In-scope HFC blends under previous patent protection.**—

Patent ownership/expiration.--Prior to the patent expiration of any in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) in 2010 and 2011, did your firm produce any in-scope HFC blends while they were under patent?

No Yes--please provide details in the table below.

HFC blend	Owned patent in the United States?	Production under lease agreement?	Patent expiration date
R-404A	<input type="checkbox"/>		
R-407A	<input type="checkbox"/>		
R-407C	<input type="checkbox"/>		
R-410A	<input type="checkbox"/>		
R-507A	<input type="checkbox"/>		

Please provide the details of your firm’s purchases/sales of licensing rights to produce or sell the in-scope HFC blends above while they were under patent, including restrictions on the volume of production/sales allowed under the licensing agreement(s):

I-8. Reclaiming operations.—

Reclaimer.--a firm that removes impurities from in-scope HFC blends R-404A, R-407A, R-407C, R-410A, and R-507A through reclaiming, reconstituting, and/or recycling in order to produce in-scope and/or out-of-scope refrigerant blends.

(a) Has your firm produced in-scope or out-of-scope HFC blend with reclaimed (used) in-scope HFC blends (i.e., your firm takes used R-404A, R-407A, R-407C, R-410A, or R-507, then use the remaining HFC components to produce a refrigerant blend, including both in-scope HFC blends or other refrigerant blends)?

No

Yes—Please check all that are applicable.

- R-404A
- R-407A
- R-407C
- R-410A
- R-507A
- Out-of-scope blends

(b) For reclaimers, what percentage of your business is involved in the following activities:

Activities of reclaimers	Share of firm's total sales (percent)
Reclaiming in-scope HCF blends	
Reclaiming R-22	
Other reclamation activities	
Non reclamation activities	
Total (should sum to 100.0 percent)	0.0

(c) For reclaimers, please describe how reclaiming fits into the overall operations of your business.

PART II.--TRADE AND RELATED INFORMATION

Further information on this part of the questionnaire can be obtained from Joanna Lo (202-205-1888, joanna.lo@usitc.gov). **Supply all data requested on a calendar-year basis.**

- II-1. **Contact information.**--Please identify the responsible individual and the manner by which Commission staff may contact that individual regarding the confidential information submitted in part II.

Name	
Title	
Email	
Telephone	
Fax	

- II-2. **Changes in operations.**--Please indicate whether your firm has experienced any of the following changes in relation to the production of R-32, R-125, R-143a, R-404A, R-407A, R-407C, R-410A, and/or R-507A since January 1, 2013.

<i>(check as many as appropriate)</i>		<i>(please describe)</i>
<input type="checkbox"/>	plant openings	
<input type="checkbox"/>	plant closings	
<input type="checkbox"/>	relocations	
<input type="checkbox"/>	expansions	
<input type="checkbox"/>	acquisitions	
<input type="checkbox"/>	consolidations	
<input type="checkbox"/>	prolonged shutdowns or production curtailments	
<input type="checkbox"/>	revised labor agreements	
<input type="checkbox"/>	other (<i>e.g.</i> , technology)	

II-3a. **Production using same machinery.**--Please report your firm’s production of all types of HFC components and/or refrigerant blends made on the same equipment and machinery used to produce R-32, R-125, R-143a, R-404A, R-407A, R-407C, R-410A, and/or R-507A, and the combined production capacity on this shared equipment and machinery in the periods indicated.

“Overall production capacity” or “capacity”--The level of production that your establishment(s) could reasonably have expected to attain during the specified periods. Assume normal operating conditions (i.e., using equipment and machinery in place and ready to operate; normal operating levels (hours per week/weeks per year) and time for downtime, maintenance, repair, and cleanup).

“Production”--All production in your U.S. establishment(s), including production consumed internally within your firm and production for another firm under a toll agreement.

- **“In-scope HFC components”**--three (3) components, R-32, R-125, R-143a.
- **“In-scope HFC blends”**--five (5) blends, R-404A, R-407A, R-407C, R-410A, and R-507A.
- **“Other products”**--any product in addition to HFC components and/or in-scope HFC blends made using the same machinery and equipment. These may include patented and proprietary HFC blends, CFC, HCFC, or HFO blends as well as other blends.

Quantity (in short tons)			
Item	Calendar years		
	2013	2014	2015
Machinery and equipment used to produce <u>HFC components</u>:			
Overall production capacity			
Production of:			
In-scope HFC components ¹	0	0	0
Out-of-scope R-134a ²	0	0	0
Other products ³			
Total	0	0	0
Machinery and equipment used to produce <u>HFC blends</u>:			
Overall production capacity			
Production of:			
In-scope HFC blends ⁴	0	0	0
Other products (such as out-of-scope refrigerant blends) ⁵			
Total	0	0	0
¹ Data entered for in scope HFC component production will populate here once reported in question II-8. ² Data entered for R-134a production will populate here once reported in question II-8. ³ Please describe these products: _____. ⁴ Data entered for production will populate here once reported in question II-10. ⁵ Please describe these products: _____.			

II-3b. **Operating parameters.**--The production capacity reported in II-3a is based on operating _____ hours per week, _____ weeks per year.

II-3c. **Capacity allocation.**--If your firm produces products other than R-32, R-125, R-143a, R-404A, R-407A, R-407C, R-410A, and/or R-507A using the same equipment (as reported above), please describe the methodology used to allocate overall machinery and equipment capacity reported in question II-3a (above) for the following:

(i) Capacity allocated for **in-scope HFC components** (as reported in question II-8).

(ii) Capacity allocated for **in-scope HFC blends** (as reported in question II-10).

II-3d. **Production constraints.**--Please describe the constraint(s) that set the limit(s) on your firm's production capacity.

II-3e. **Swap agreements using imported HFC Components.**--

"Swap Agreement"--Agreement between two firms whereby firm A produces one HFC component X and trades a portion of that HFC component X for firm B's production and/or imports of HFC component Y.

Since January 1, 2013, has your firm used imported HFC components (R-32, R-125, R-143a, and/or R-134a) to satisfy any portion of your swap agreement?

No/NA

Yes--Please describe the source of the imported HFC components and quantities supplied.

II-3f. **Product shifting between components.**--Is your firm able to produce more than one individual HFC component (R-32, R-125, R-143a, and R-134a) using the same equipment and/or labor?

No

Yes-- Please describe the factors that affect your firm's ability to shift production among the above four HFC components (e.g., time, cost, relative price change, etc.), and the degree to which these factors enhance or constrain such shifts.

II-3g. **Product shifting from components to other products.**--Is your firm able to switch production from HFC components (R-32, R-125, R-143a, and R-134a) to other products using the same equipment and/or labor?

No

Yes-- (i.e., have produced other products or are able to produce other products). Please identify other actual or potential products: _____.

Please describe the factors that affect your firm's ability to shift production from HFC components (R-32, R-125, R-143a, and R-134a) to other products (e.g., time, cost, relative price change, etc.), and the degree to which these factors enhance or constrain such shifts.

II-3h. **Product shifting between in-scope blends.**--Is your firm able to produce more than in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) using the same equipment and/or labor?

No

Yes-- (i.e., have produced different HFC blends using the same equipment and/or labor).

Please describe the factors that affect your firm's ability to shift production among HFC blends (e.g., time, cost, relative price change, etc.), and the degree to which these factors enhance or constrain such shifts.

II-3i. **Product shifting from in-scope HFC blends to other products.**--Is your firm able to switch production from the five in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) to other products using the same equipment and/or labor?

- No Yes-- (i.e., have produced other products or are able to produce other products). Please identify other actual or potential products: _____.

Please describe the factors that affect your firm's ability to shift production between products (e.g., time, cost, relative price change, etc.), and the degree to which these factors enhance or constrain such shifts.

II-3j. **Capital investments.**--

(i) Please describe and quantify the amount of capital investments needed to **produce one or more of the HFC components (R-32, R-125, R-143a, and R-134a)**. Exclude the costs of any blending operations in the United States.

(ii) Please describe and quantify the amount of capital investments needed to **produce one or more of the in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A)**. Exclude the costs of any HFC component operations in the United States.

(iii) Please describe and quantify the amount of capital investments needed **to provide reclamation services** (excluding the costs of any blending operations) in the United States.

II-4. **Tolling**--

“Toll agreement”--Agreement between two firms whereby the first firm furnishes the raw materials and the second firm uses the raw materials to produce in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) and/or HFC components (R-32, R-125, R-143a, and R-134a) that it then returns to the first firm with a charge for processing costs, overhead, etc.

Since January 1, 2013, has your firm been involved in a toll agreement regarding the production of in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) and/or HFC components (R-32, R-125, R-143a, and R-134a)?

- No Yes--Please describe the toll arrangement(s) and name the firm(s) involved and check all that apply.

(Check all the apply)

- Our firm is a toller for HFC components (actually produces) using raw materials provided by another firm.
- Our firm is a tollee for HFC components (another firm actually produces) using raw materials provided by our firm.
- Our firm is a toller for in-scope HFC blends (actually produces) using raw materials provided by another firm.
- Our firm is a tollee for in-scope HFC blends (another firm actually produces) using raw materials provided by our firm.

II-5. **Repackaging**--

“Repackaging agreement”--Agreement between two firms whereby the first firm supplies in-scope HFC blends and the second firm repackages the supplied in-scope HFC blends.

Since January 1, 2013, has your firm been involved in a repackaging agreement regarding in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A)?

- No Yes--Please describe the repackaging arrangement(s) and name the firm(s) involved and check all that apply. NOTE.--Generally, in parts II, III, and IV of this questionnaire, data relating to resales including those that have been repackaged should not be included in the provided data.

(Check all the apply)

- Our firm repackages in-scope HFC blends as part of a repackaging agreement using HFC blends supplied by another firm.
- Our firm supplies in-scope HFC blends to another firm for repackaging.

II-6. **Foreign trade zones.**—

“Foreign trade zone” is a designated location in the United States where firms utilize special procedures that allow delayed or reduced customs duty payments on foreign merchandise. A foreign trade zone must be designed as such pursuant to the rules and procedures set forth in the Foreign-Trade Zones Act.

- (a) **Firm's FTZ operations.**--Does your firm produce HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) and/or admit HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) into a foreign trade zone (FTZ)?

- No Yes--Describe the nature of your firms operations in FTZs and identify the specific FTZ site(s).

- (b) **Other firms' FTZ operations.**--To your knowledge, do any firms in the United States import HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) into a foreign trade zone (FTZ) for use in distribution of HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) and/or the production of downstream articles?

- No/Don't know Yes--Identify the firms and the FTZs.

- II-7. **Importer.**--Since January 1, 2013, has your firm imported HFC components (R-32, R-125, R-143a, and R-134a) or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A)?

“Importer”--The person or firm primarily liable for the payment of any duties on the merchandise, or an authorized agent acting on his behalf. The importer may be the consignee, or the importer of record.

- No Yes--**COMPLETE AND RETURN A U.S. IMPORTERS' QUESTIONNAIRE**

Trade Data Definitions

“Average production capacity” or “capacity”-- The level of production that your establishment(s) could reasonably have expected to attain during the specified periods. Assume normal operating conditions (i.e., using equipment and machinery in place and ready to operate; normal operating levels (hours per week/weeks per year) and time for downtime, maintenance, repair, and cleanup; and a typical or representative product mix).

“Production”--All production in your U.S. establishment(s), including production consumed internally within your firm and production for another firm under a toll agreement.

“U.S. commercial shipments”--Shipments made within the United States as a result of an arm’s length commercial transaction in the ordinary course of business. Report net values (i.e., gross sales values less all discounts, allowances, rebates, prepaid freight, and the value of returned goods) in U.S. dollars, f.o.b. your point of shipment.

“Internal consumption”--Product consumed internally by your firm.

“Transfers to related firms”--Shipments made to related domestic firms. Such transactions are valued at fair market value.

“Related firm”--A firm that your firm solely or jointly owns, manages, or otherwise controls. Such transactions are valued at fair market value.

“Export shipments”--Shipments to destinations outside the United States, including shipments to related firms.

“Inventories”--Finished goods inventory, not raw materials or work-in-progress.

“Swap Agreement”--Agreement between two firms whereby firm A produces one HFC component X and trades a portion of that HFC component X for firm B’s production and/or imports of HFC component Y.

Note.--Re-sales of purchased HFC components (including repackaged and reclaimed components) should not be include in questions II-8 through II-14 below. However, if purchased HFC components were blended, then the data on the production of HFC blends should be provided in questions II-10 through II-14.

As requested in Part I of this questionnaire, please keep all supporting documents/records used in the preparation of the trade data, as Commission staff may contact your firm regarding questions on the trade data. The Commission may also request that your company submit copies of the supporting documents/records (such as production and sales schedules, inventory records, etc.) used to compile these data.

II-8. **Production, shipment and inventory data for HFC components.**--Report your firm's production capacity, production, shipments, and inventories related to the production of HFC components (including both the in-scope HFC components R-32, R-125, and R-143a and the out-of-scope HFC component R-134a) in its U.S. establishment(s) during the specified periods.

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Average production capacity¹ (quantity):			
R-32 (A)			
R-125 (B)			
R-143a (C)			
Out-of-scope R-134a (D)			
Total capacity of HFC components (E)	0	0	0
Beginning-of-period inventories (quantity) (F)			
Production (quantity):			
R-32 (G)			
R-125 (H)			
R-143a (I)			
Out-of-scope R-134a (J)			
Total production of HFC components (K)	0	0	0
Swap transactions of components:²			
Quantity given, net (L)			
Quantity received, net (M)			
Net monetary exchange ³ (N)			
Total available for shipment (O)⁴	0	0	0

¹ The average production capacity reported is based on operating _____ hours per week, _____ weeks per year. Please describe the methodology used to allocate overall production capacity reported in question II-3a to the HFC components R-32, R-125, R-143a, and R-134a reported here. _____.

² Please describe the swap transactions including (i) the goods involved, (ii) how your firm's accounts for the nonmonetary exchange, (iii) the counterparties to the exchange(s), and (iv) the economic rationale for this business model. _____.

³ Was there any monetary consideration exchanged, also known as a boot in accounting slang, involved in the swap transactions? No Yes--Report the net amount exchanged (report negative values if your firm paid, positive values if your firm received consideration) in line N and describe how the amount exchanged was determined _____.

⁴ Total available for shipment in a given year is the net after swap quantity available for shipment (e.g., BOP inventories, plus production, net of swap exchanges).

II-8. **Production, shipment and inventory data for HFC components.**—*Continued*

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
U.S. shipments of in-scope HFC components (R-32, R-125, & R-143a):⁵			
Commercial shipments:			
Quantity (P)	0	0	0
Value (Q)	0	0	0
Internal consumption:			
Quantity (R)			
Value ⁶ (S)			
Transfers to related firms:			
Quantity (T)			
Value ⁶ (U)			
U.S. shipments of out-of-scope HFC component (R-134a):⁵			
Commercial shipments:			
Quantity (V)	0	0	0
Value (W)	0	0	0
Internal consumption:			
Quantity (X)			
Value ⁶ (Y)			
Transfers to related firms:			
Quantity (Z)			
Value ⁶ (AA)			
Export shipments:⁷			
In-scope HFC components (R-32, R-125, and R-143a).--			
Quantity (AB)			
Value (AC)			
Out-of-scope HFC component (R-134a).--			
Quantity (AD)			
Value (AE)			
End-of-period inventories:			
In-scope HFC components (R-32, R-125, and R-143a) (quantity) (AF)			
Out-of-scope HFC component (R-134a) (quantity) (AG)			

⁵ Data will populate in this grid for commercial U.S. shipments based on what is entered into question II-9.

⁶ Internal consumption and transfers to related firms must be valued at fair market value. In the event that your firm uses a different basis for valuing these transactions, please specify that basis (e.g., cost, cost plus, etc.) and provide value data using that basis for each of the periods noted above: _____.

⁷ Identify your firm's principal export markets: _____.

RECONCILIATION OF SHIPMENTS, PRODUCTION, AND INVENTORY.--Generally, the data reported for the end-of-period inventories (i.e., lines AF and AG) should be equal total product available for shipment (i.e., line O), less total shipments (i.e., lines P, R, T, V, X, Z, AB, and AD). Please ensure that any differences are not due to data entry errors in completing this form, but rather actually reflect your firm's records; and also provide any likely explanations for any differences (e.g., theft, loss, damage, record systems issues, etc.) if they exist.

Reconciliation	Calendar years		
	2013	2014	2015
O – P – R – T – V – X – Z – AB – AD – AF – AG = should equal zero ("0") or provide an explanation. ¹	0	0	0
¹ Explanation if the calculated fields above are returning values other than zero (i.e., "0") but are nonetheless accurate: _____.			

II-9. **Commercial shipments of HFC components by individual component and channel.**--Report your firm's commercial U.S. shipments by individual component and channel of distribution.

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Commercial U.S. shipments:			
R-32:			
Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users:</u>			
Quantity (AH)			
Value (AI)			
Sold to <u>blenders/repackagers</u>			
Quantity (AK)			
Value (AK)			
Sold to <u>original equipment manufacturers</u>			
Quantity (AL)			
Value (AM)			

Question continued next page

II-9. **Commercial shipments of HFC components by individual component and channel.**--Continued

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
R-125: Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : <i>Quantity (AN)</i>			
<i>Value (AO)</i>			
Sold to <u>blenders/repackagers</u> <i>Quantity (AP)</i>			
<i>Value (AQ)</i>			
Sold to <u>original equipment manufacturers</u> <i>Quantity (AR)</i>			
<i>Value (AS)</i>			
R-143a: Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : <i>Quantity (AT)</i>			
<i>Value (AU)</i>			
Sold to <u>blenders/repackagers</u> <i>Quantity (AV)</i>			
<i>Value (AW)</i>			
Sold to <u>original equipment manufacturers</u> <i>Quantity (AX)</i>			
<i>Value (AY)</i>			
R-134a (out-of-scope): Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : <i>Quantity (AZ)</i>			
<i>Value (BA)</i>			
Sold to <u>blenders/repackagers</u> <i>Quantity (BB)</i>			
<i>Value (BC)</i>			
Sold to <u>original equipment manufacturers</u> <i>Quantity (BD)</i>			
<i>Value (BE)</i>			

II-10. **Production, shipment and inventory data for in-scope HFC blends.**--Report your firm's production capacity, production, shipments, and inventories related to the production of in-scope HFC blends in its U.S. establishment(s) during the specified periods. *Data can include production of in-scope HFC blends produced from reclaimed components and blends.*

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Average production capacity¹ (quantity) (BF)			
Beginning-of-period inventories (quantity) (BG)			
Production (quantity):			
R-404A (BH)			
R-407A(BI)			
R-407C (BJ)			
R-410A (BK)			
R-507A (BL)			
Total production of in-scope HFC blends (BM)	0	0	0
U.S. shipments:			
Commercial shipments:²			
Quantity (BN)	0	0	0
Value (BO)	0	0	0
Internal consumption:			
Quantity (BP)			
Value ³ (BQ)			
Transfers to related firms:			
Quantity (BR)			
Value ³ (BS)			
Export shipments:⁴			
Quantity (BT)			
Value (BU)			
End-of-period inventories (quantity) (BV)			

¹ The production capacity (see definitions in instruction booklet) reported is based on operating _____ hours per week, _____ weeks per year. Please describe the methodology used to calculate production capacity, and explain any changes in reported capacity (use additional pages as necessary)._____.

² Data will populate in this grid for commercial U.S. shipments based on what is entered into question II-12.

³ Internal consumption, transfers to related firms, and swap transactions must be valued at fair market value. In the event that your firm uses a different basis for valuing these transactions, please specify that basis (e.g., cost, cost plus, etc.) and provide value data using that basis for each of the periods noted above: _____.

⁴ Identify your firm's principal export markets: _____. Please describe the product mix of your export shipments as compared to your U.S. shipments (i.e., is it similar or different, please indicate how so).

II-10. **Production, shipment and inventory data for in-scope HFC blends.**--Continued

RECONCILIATION OF SHIPMENTS, PRODUCTION, AND INVENTORY.--Generally, the data reported for the end-of-period inventories (i.e., line BV) should be equal to beginning of period inventories (i.e., line BG) plus production (i.e., line BM), less total shipments (i.e., linesBN, BP, BR and BT). Please ensure that any differences are not due to data entry errors in completing this form, but rather actually reflect your firm's records; and also provide any likely explanations for any differences (e.g., theft, loss, damage, record systems issues, etc.) if they exist.

Reconciliation	Calendar years		
	2013	2014	2015
BG + BM –BN – BP – BR – BT – BV = should equal zero ("0") or provide an explanation. ¹	0	0	0
¹ Explanation if the calculated fields above are returning values other than zero (i.e., "0") but are nonetheless accurate: _____.			

II-11. **Sources of inputs used in the production of in-scope HFC blends.**—Report your firm’s production of in-scope HFC blends, by source of new HFC components (e.g., R-32, R-124, 143a, and 134a in lines BW, BX, BZ, and CA) as well as reclaimed HFC components or blends (in line CC), for the specified periods.

Quantity (in short tons)			
Item	Calendar years		
	2013	2014	2015
Production of in-scope HFC blends using HFC components--			
Produced in the United States (including swapped) ¹ by your firm (BW)			
Purchased by your firm and produced in the United States by another firm (BX)			
Total production using domestic components (BY)	0	0	0
Imported from China (direct imports or purchases of imports) (BZ) ¹			
Imported from sources other than China (direct imports or purchases of imports) (CA) ¹			
Total production using imported sources (CB) ²	0	0	0
Production of in-scope HFC blends using reclaimed inputs (components or blends) regardless of source (CC) ³			
Total production of blends (CD)	0	0	0

¹ Count as domestic any inputs used by your firm with swapped merchandise if your firm gave its own domestic product for a component of foreign origin (known or unknown). Count as foreign any inputs used by your firm (even if the actual component used was produced in the United States) if your firm procured the domestic component pursuant to swap arrangement in which you gave imported components.

² Please provide the value or cost of the imported HFC components embodied in line CB:

Item	2013	2014	2015
Value of imported inputs (\$1,000)			

³ Additions of commercially procured new HFC components and/or HFC blends mixed with the reclaimed gases should be reported as appropriate based on the source of those materials in lines BW, BX, BZ, and CA. But the volume of reclaimed inputs should be reported in CC.

RECONCILIATION OF PRODUCTION.—Total production of blends reported in II-11 by source of inputs should equal total production of blends reported in II-10 by type of blend.

Reconciliation	Calendar years		
	2013	2014	2015
CD – BM = should equal zero ("0"), if not revise	0	0	0

II-12. **Commercial shipments of in-scope HFC blends by individual blend and channel.**--Report your firm's commercial U.S. shipments of in-scope HFC blends by individual blend and by channel of distribution.

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Commercial U.S. shipments:			
R-404A:			
Sold to <u>distributors and service companies and/or to equipment owners/end users:</u>			
Quantity (CE)			
Value (CF)			
Sold to <u>blenders/repackagers</u>			
Quantity (CG)			
Value (CH)			
Sold to <u>original equipment manufacturers</u>			
Quantity (CI)			
Value (CJ)			
R-407A:			
Sold to <u>distributors and service companies and/or to equipment owners/end users:</u>			
Quantity (CK)			
Value (CL)			
Sold to <u>blenders/repackagers</u>			
Quantity (CM)			
Value (CN)			
Sold to <u>original equipment manufacturers</u>			
Quantity (CO)			
Value (CP)			

Question continued next page

II-12. Commercial shipments of in-scope HFC blends by individual blend and channel.--Continued

Quantity (in short tons) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Commercial U.S. shipments:			
R-407C:			
Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : Quantity (CQ)			
Value (CR)			
Sold to <u>blenders/repackagers</u> Quantity (CS)			
Value (CT)			
Sold to <u>original equipment manufacturers</u> Quantity (CU)			
Value (CV)			
R-410A:			
Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : Quantity (CW)			
Value (CX)			
Sold to <u>blenders/repackagers</u> Quantity (CY)			
Value (CZ)			
Sold to <u>original equipment manufacturers</u> Quantity (DA)			
Value (DB)			
R-507A:			
Sold to <u>distributors and service companies</u> and/or to <u>equipment owners/end users</u> : Quantity (DC)			
Value (DD)			
Sold to <u>blenders/repackagers</u> Quantity (DE)			
Value (DF)			
Sold to <u>original equipment manufacturers</u> Quantity (DG)			
Value (DH)			

II-13. **Employment data.**--Report your firm’s employment-related data related to the production of in-scope HFC blends and four HFC components (R-32, R-125, R-143a, and R-134a) and provide any explanation for any trends in these data.

“Production Related Workers” (PRWs) includes working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspecting, receiving, storage, handling, packing, warehousing, shipping, trucking, hauling, maintenance, repair, janitorial and guard services, product development, auxiliary production for plant’s own use (e.g., power plant), recordkeeping, and other services closely associated with the above production operations.

Average number employed may be computed by adding the number of employees, both full time and part time, for the 12 pay periods ending closest to the 15th of the month and divide that total by 12.

“Hours worked” includes time paid for sick leave, holidays, and vacation time. Include overtime hours actually worked; do not convert overtime pay to its equivalent in straight time hours.

“Wages paid” –Total wages paid before deductions of any kind (e.g., withholding taxes, old-age and unemployment insurance, group insurance, union dues, bonds, etc.). Include wages paid directly by your firm for overtime, holidays, vacations, and sick leave.

Item	Calendar years		
	2013	2014	2015
In-scope HFC components			
Average number of PRWs (<i>number</i>)			
Hours worked by PRWs (<i>1,000 hours</i>)			
Wages paid to PRWs (<i>\$1,000</i>)			
Out-of-scope HFC component R-134a			
Average number of PRWs (<i>number</i>)			
Hours worked by PRWs (<i>1,000 hours</i>)			
Wages paid to PRWs (<i>\$1,000</i>)			
In-scope HFC blends			
Average number of PRWs (<i>number</i>)			
Hours worked by PRWs (<i>1,000 hours</i>)			
Wages paid to PRWs (<i>\$1,000</i>)			

Explanation of trends:

II-14. **Related firms.**--If your firm reported transfers to related firms in question II-8, please indicate the nature of the relationship between your firm and the related firms (*e.g.*, joint venture, wholly owned subsidiary), whether the transfers were priced at market value or by a non-market formula, whether your firm retained marketing rights to all transfers, and whether the related firms also processed inputs from sources other than your firm.

--

II-15. **Purchases of HFC components and in-scope HFC blends from China.**--Other than direct imports, has your firm otherwise purchased HFC components (R-32, R-125, R-143a, and R-134a) and/or in-scope HFC blends (R-404A, R-407A, R-407C, R-410A, and R-507A) from China since January 1, 2013?

“Purchase”-- A transaction to buy the four HFC components and/or the (5) HFC blends from a U.S. corporate entity such as another U.S. producer, a U.S. distributor, or a U.S. firm that has directly imported the four HFC components and/or the five in-scope HFC blends.

“Direct import”--A transaction to buy from a foreign producer where your firm is the importer of record or consignee. (Per question II-7, if your firm directly imports HFC components and/or in-scope HFC blends, your firm should be submitting a separate U.S. importers' questionnaire response).

Note.--Re-sales of purchased HFC components (including repackaged and reclaimed components) should not be include in questions II-8 through II-14 above. However, if purchased HFC components were blended, then the data on the production of HFC blends should be provided in questions II-10 through II-14.

No Yes--Report such purchases below and explain the reasons for your firms' purchases:

(Quantity in short tons)			
Item	Calendar years		
	2013	2014	2015
Purchases of HFC components imported from China			
R-32 ¹			
R-125 ²			
R-143a ³			
Out-of-scope R-134a ⁴			
Purchases of in-scope HFC blends imported from China⁵			
¹ Please list the name(s) of the importer(s) from China from which your firm purchased R-32: _____. ² Please list the name(s) of the importer(s) from China from which your firm purchased R-125: _____. ³ Please list the name(s) of the importer(s) from China from which your firm purchased R-143a: _____. ⁴ Please list the name(s) of the importer(s) from China from which your firm purchased R-134a: _____. ⁵ Please list the name(s) of the importer(s) from China from which your firm purchased in-scope HFC blends: _____. _____			

II-16. **Other explanations:**--If your firm would like to further explain a response to a question in Part II that did not provide a narrative box, please note the question number and the explanation in the space provided below. Please also use this space to highlight any issues your firm had in providing the data in this section, including but not limited to technical issues with the MS Word questionnaire.

--

PART III.--FINANCIAL INFORMATION

Address questions on this part of the questionnaire to David Boyland (202-708-4725, david.boyland@usitc.gov).

III-1. **Contact information.**-- Please identify the responsible individual and the manner by which Commission staff may contact that individual regarding the confidential information submitted in part III.

Name	
Title	
Email	
Telephone	
Fax	

III-2. **Accounting system.**--Briefly describe your firm’s financial accounting system.

A. When does your firm’s fiscal year end (month and day)? _____
If your firm’s fiscal year changed during the data-collection period, explain below:

B.1. Describe the lowest level of operations (e.g., plant, division, company-wide) for which financial statements are prepared that include in-scope HFC components and/or in-scope HFC blends:

2. Does your firm prepare profit/loss statements for in-scope HFC components and/or in-scope HFC blends?
 Yes No

3. How often did your firm (or parent company) prepare financial statements (including annual reports, 10Ks)? Please check relevant items below.
 Audited, unaudited, annual reports, 10Ks, 10 Qs,
 Monthly, quarterly, semi-annually, annually

4. Accounting basis: GAAP, cash, tax, or other comprehensive basis of accounting (specify) _____

Note: As requested in Part I of this questionnaire, please keep all supporting documents/records used in the preparation of the financial data, as Commission staff may contact your firm regarding questions on the financial data. The Commission may also request that your company submit copies of the supporting documents/records (financial statements, including internal profit-and-loss statements for the division or group that includes in-scope HFC components and in-scope HFC blends, as well as specific statements and worksheets) used to compile these data.

III-3a. **Cost accounting system.**--Briefly describe your firm’s cost accounting system (e.g., standard cost, job order cost, etc.). Please also specify, as applicable, how HFC component swap transactions are reflected in reported cost of goods sold (table III-9a and table III-9d).

III-3b. **Swap accounting.**--From the perspective of the relevant business unit responding to this questionnaire and as applicable, please describe in the space below how HFC component swaps are recognized in the normal course of business. Your response should include a description of the specific manufacturing costs that are recognized pursuant to the swap exchange (e.g., variable costs only or fully-absorbed manufacturing costs) and the extent to which this treatment is reflected in the relevant costs reported in table III-9a, III-9b, and/or III-9d.

(Note: With regard to operations on in-scope HFC components, the Commission requests that HFC component swaps (from the perspective of relevant in-scope HFC components given up in exchange) be reported at fair market value and corresponding costs be reported in cost of goods sold (see instructions to table III-9a). With regard to operations on in-scope HFC blends, HFC components received pursuant to a swap and used to produce in-scope HFC blends should, as applicable, be included in in-scope HFC blends costs of goods (see instructions to table III-9d).)

III-3c. **Swap ratios.**--To the extent that your company engages in HFC component swaps, please identify the parties to the arrangement, relevant swap ratios, and how the reported ratios were determined. Please also describe the extent to which relevant swap ratios changed during the period and the reason for such changes.

III-4. **Allocation basis.**--With respect to in-scope HFC components, relevant out-of-scope HFC components, and in-scope HFC blends, please briefly describe your firm’s allocation basis, if any, for cost of goods sold, SG&A, and interest expense and other income and expenses.

III-5. **Other products.**--Please list the products your firm produced in the facilities in which your firm produced in-scope HFC components and in-scope HFC blends, and provide the share of net sales accounted for by these products in your firm’s most recent fiscal year.

Products	Share of sales
In-scope HFC components	%
In-scope HFC blends	%
	%
	%
	%
	%

III-6. Does your firm purchase inputs (raw materials, labor, energy, or any services) used in the production of in-scope HFC components and/or in-scope HFC blends from any related suppliers; e.g., inclusive of transactions between related firms, divisions, and/or other components within the same company?

Yes--Continue to question III-7. No--Continue to question III-9a.

III-7. **Inputs from related suppliers.**--Please identify the inputs used in the production of in-scope HFC components and in-scope HFC blends that your firm purchases from related suppliers and that are reflected in in-scope HFC components cost of goods sold (COGS) (III-9a and III-9b) and in-scope HFC blends COGS (III-9d), respectively. For “Share of total COGS” please report this information by relevant input on the basis of your most recently completed fiscal year. For “Input valuation” please describe the basis, as recorded in your company’s own accounting system, of the purchase cost from the related supplier; e.g., the related supplier’s actual cost, cost plus, or negotiated transfer price to approximate fair market value.

In-scope HFC components COGS		
Input	Related supplier	Share of total COGS ¹
Basis of input valuation as recorded in the firm’s accounting books and records:		
In-scope HFC blends COGS²		
Input	Related supplier	Share of total COGS ¹
Basis of input valuation as recorded in the firm’s accounting books and records:		
¹ Share of total COGS specific to in-scope HFC components and in-scope HFC blends, respectively. ² Information relevant to any out-of-scope HFC component which is used to produce in-scope HFC blends should be reported, if applicable, in this section of the table.		

III-8. **Inputs purchased from related suppliers.**--Please confirm that the inputs purchased from related suppliers, as identified in III-7, were reported for in-scope HFC components COGS (III-9a and III-9b) and in-scope HFC blends COGS (III-9d) in a manner consistent with your firm's accounting books and records.

Yes

No--In the space below, please report the valuation basis of inputs purchased from related suppliers and reflected in the COGS reported in III-9a, III-9b, and III-9d.

III-9a. Overall operations on in-scope HFC components.--Report the revenue and related cost information requested below on the in-scope HFC component operations of your firm's U.S. establishment(s).¹ Do not report resales of products. Note that transfers to related firms, internal consumption, and swaps (from the perspective of relevant in-scope HFC components given up in exchange) must be valued at fair market value. Input purchases from related suppliers should be consistent with and based on information in the firm's accounting books and records. Provide data for your firm's three most recently completed fiscal years. If your firm was involved in in-scope HFC component tolling operations (either as the toller or as the tollee), please contact David Boyland at (202)708-4725 before completing this section of the questionnaire.

Quantity (in short tons) and value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
Net sales quantities:²			
Commercial sales ("CS")	0	0	0
Transfers to related firms ("Transfers")	0	0	0
Internal consumption ("IC")	0	0	0
Swaps	0	0	0
Total net sales quantities	0	0	0
Net sales values:²			
Commercial sales	0	0	0
Transfers to related firms	0	0	0
Internal consumption	0	0	0
Swaps	0	0	0
Total net sales values	0	0	0
Cost of goods sold (COGS):³			
Primary raw materials	0	0	0
Direct labor	0	0	0
Other factory costs ⁴	0	0	0
Total COGS	0	0	0
Gross profit or (loss)	0	0	0
Selling, general, and administrative (SG&A) expenses:			
Selling expenses	0	0	0
General and administrative expenses	0	0	0
Total SG&A expenses	0	0	0
Operating income (loss)	0	0	0
Other expenses and income:			
Interest expense	0	0	0
All other expense items	0	0	0
All other income items ⁴	0	0	0
Net income or (loss) before income taxes	0	0	0
Depreciation/amortization included above	0	0	0

Table continued on following page.

III-9a. Operations on in-scope HFC components.—Continued

¹ Include only relevant revenue items (whether domestic or export) and costs related to your U.S. manufacturing operations.

² Less discounts, returns, allowances, and prepaid freight. The quantities and values should approximate the corresponding shipment quantities and values reported in Part II of this questionnaire.

³ To the extent applicable (and whether associated with domestic or export revenue items), COGS should include costs associated with CS, Transfers, IC, and swaps (i.e., the relevant cost of HFC components given up in exchange and recognized in COGS).

⁴ Please report relevant by-product revenue as an offset to other factory costs, as opposed to a component of other income.

Note -- The table above contains calculations that will appear when you have entered data in the MS Word form fields.

III-9b. Operations on in-scope HFC components – U.S. commercial shipments and exports only (“open market sales”).--Report the revenue and related cost information requested below on the in-scope HFC component operations of your firm’s U.S. establishment(s).¹ Include both domestic and export commercial sales of the in-scope HFC components your firm produced, but do not report resales of products. Input purchases from related suppliers should be consistent with and based on information in the firm’s accounting books and records. Provide data for your firm’s three most recently completed fiscal years. If your firm was involved in in-scope HFC component tolling operations (either as the toller or as the tollee), please contact David Boyland at (202)708-4725 before completing this section of the questionnaire.

Quantity (in short tons) and value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
Net sales quantities: ²			
Commercial sales (“CS”)	0	0	0
Net sales values: ²			
Commercial sales	0	0	0
Cost of goods sold (COGS): ³			
Primary raw materials	0	0	0
Direct labor	0	0	0
Other factory costs ⁴	0	0	0
Total COGS	0	0	0
Gross profit or (loss)	0	0	0
Selling, general, and administrative (SG&A) expenses:			
Selling expenses	0	0	0
General and administrative expenses	0	0	0
Total SG&A expenses	0	0	0
Operating income (loss)	0	0	0
Other expenses and income:			
Interest expense	0	0	0
All other expense items	0	0	0
All other income items ⁴	0	0	0
Net income or (loss) before income taxes	0	0	0
Depreciation/amortization included above	0	0	0

¹ Include only relevant revenue items (whether domestic or export) and costs related to your U.S. manufacturing operations.

² Less discounts, returns, allowances, and prepaid freight. The quantities and values should approximate the corresponding shipment quantities and values reported in Part II of this questionnaire. Commercial sales quantities and commercial sales values reported here will be populated from data entered into question III-9a.

³ COGS (whether for domestic or export sales) should include costs associated with open market sales only. Costs associated with input purchases from related suppliers should be consistent with and based on information in the firm’s accounting books and records.

⁴ Please report relevant by-product revenue as an offset to other factory costs, as opposed to a component of other income.

Note -- The table above contains calculations that will appear when you have entered data in the MS Word form fields.

III-9c. Internally-produced HFC component costs recognized in COGS of operations on in-scope HFC blends.--Report the requested cost information specific to HFC components produced in your firm's U.S. establishment(s) and recognized in table III-9d financial results on in-scope HFC blends. The total amount reported in this table will populate the total line item *Cost of internally-produced HFC components recognized in COGS* as reported in table III-9d. Relevant input purchases from related suppliers should be consistent with and based on information in the firm's accounting books and records. Provide data for your firm's three most recently completed fiscal years.

Item	Value (in \$1,000)		
	Fiscal years ended--		
	2013	2014	2015
Cost of internally-produced components recognized in table III-9d COGS (in-scope HFC blends):			
Raw materials	0	0	0
Direct labor	0	0	0
Other factory costs ¹	0	0	0
Total cost of internally-produced components recognized in III-9d COGS ²	0	0	0
¹ Please report relevant by-product revenue as an offset to other factory costs, as opposed to a component of other income. ² Total cost of internally-produced components will populate the relevant line item in table III-9d (<i>in-scope HFC blends -- Cost of internally-produced components recognized in COGS</i>).			
Note.--These costs should, to the extent applicable, reflect all internally produced HFC component costs relevant to the company's HFC blending operations and would include both in-scope HFC components and, if applicable, the out-of-scope HFC component R-134a. Internally-produced components which were not further processed into in-scope HFC blends (e.g., they were sold on a stand-alone basis and/or processed into out of scope HFC blends) are not relevant to this table (or table III-9d) but should instead be reflected in table III-9a.			

III-9d. Operations on in-scope HFC blends.-- Report the revenue and related cost information requested below on the in-scope HFC blends operations of your firm's U.S. establishment(s).¹ Do not report resales of products. Note that transfers to related firms and internal consumption must be valued at fair market value. Input purchases from related suppliers should be consistent with and based on information in the firm's accounting books and records. Provide data for your firm's three most recently completed fiscal years. If your firm was involved in in-scope HFC blends tolling operations (either as the toller or as the tollee), please contact David Boyland at (202)708-4725 before completing this section of the questionnaire.

Quantity (<i>in short tons</i>) and value (<i>in \$1,000</i>)			
Item	Fiscal years ended--		
	2013	2014	2015
Net sales quantities: ²			
Commercial sales ("CS")	0	0	0
Transfers to related firms ("Transfers")	0	0	0
Internal consumption ("IC")	0	0	0
Total net sales quantities	0	0	0
Net sales values: ²			
Commercial sales	0	0	0
Transfers to related firms	0	0	0
Internal consumption	0	0	0
Total net sales values	0	0	0
Cost of goods sold (COGS): ³			
Cost of internally-produced components recognized in COGS (from III-9c) ⁴	0	0	0
Purchased or swapped ⁵ components recognized in COGS (U.S. origin)	0	0	0
Purchased or swapped ⁵ components recognized in COGS (imported)	0	0	0
Recovered HFC components or blends ⁶	0	0	0
All other raw materials (blending operations only)	0	0	0
Direct labor (blending operations only)	0	0	0
Other factory costs (blending operations only) ⁷	0	0	0
Total COGS	0	0	0
Gross profit or (loss)	0	0	0
Selling, general, and administrative (SG&A) expenses:			
Selling expenses	0	0	0
General and administrative expenses	0	0	0
Total SG&A expenses	0	0	0
Operating income (loss)	0	0	0
Other expenses and income:			
Interest expense	0	0	0
All other expense items	0	0	0
All other income items ⁷	0	0	0
Net income or (loss) before income taxes	0	0	0
Depreciation/amortization included above	0	0	0

Table continued on following page.

III-9d. Operations on in-scope HFC blends.--Continued

¹ Include only relevant revenue items (whether domestic or export) and costs related to your U.S. manufacturing operations.
² Less discounts, returns, allowances, and prepaid freight. The quantities and values should approximate the corresponding shipment quantities and values reported in Part II of this questionnaire.
³ To the extent applicable (and whether associated with domestic or export revenue items), COGS should include costs associated with in-scope HFC blends CS, Transfers, and IC.
⁴ With respect to operations on in-scope HFC blends, total cost of internally-produced components recognized in COGS are reported in question III-9c and will populate this line item.
⁵ Relevant HFC components received from a third party pursuant to swap transactions and recognized in in-scope HFC blends COGS, as applicable.
⁶ This input line item is intended primarily for producers who operate as HFC reclaimers. HFC reclaimers should also report conversion costs and SG&A expenses allocable to HFC reclaiming operations.
⁷ Please report relevant by-product revenue related to blending operations as an offset to other factory costs, as opposed to a component of other income.

Note -- The table above contains calculations that will appear when you have entered data in the MS Word form fields.

III-9e. **Financial data reconciliation.**--The calculable line items in tables III-9a through III-9d (*i.e.*, total net sales quantities and values, total COGS, gross profit (or loss), total SG&A, and net income (or loss)) have been calculated from the data submitted in the other line items. Do the calculated fields return the correct data according to your firm's financial records ignoring non-material differences that may arise due to rounding?

Yes No--If the calculated fields do not show the correct data, please double check the feeder data for data entry errors and revise.

Also, check signs accorded to the post operating income line items; the two expense line items should report positive numbers (*i.e.*, expenses are positive and incomes or reversals are negative--instances of the latter should be rare in those lines) while the income line item also in most instances should have its value be a positive number (*i.e.*, income is positive, expenses or reversals are negative).

If after reviewing and potentially revising the feeder data your firm has provided, the differences between your records and the calculated fields persist please identify and discuss the differences in the space below.

III-10. **Nonrecurring items (charges and gains) included in in-scope HFC components and in-scope HFC blends financial results.**--For each annual period for which financial results are reported in question III-9a, III-9b, and/or III-9d, please specify all material (significant) nonrecurring items (charges and gains) in the schedule below, the specific table III-9a, III-9b, and/or III-9d line item where the nonrecurring items are included, a brief description of the relevant nonrecurring items, and the associated values (*in \$1,000*), as reflected in table III-9a, III-9b, and/or III-9d; i.e., if an aggregate nonrecurring item has been allocated to table III-9a, III-9b, and/or III-9d, only the allocated value amount included in table III-9a, III-9b, and/or III-9d should be reported in the schedule below.

Note: The Commission’s objective here is to gather information only on significant nonrecurring items which impacted the reported financial results in table III-9a, III-9b, and/or III-9d.

	Fiscal years ended--		
	2013	2014	2015
Nonrecurring item: In this column please provide a brief description of each nonrecurring item and indicate the specific line item in table III-9a, III-9b, and/or III-9d where the nonrecurring item is classified.	Nonrecurring item: In these columns please report the amount of the relevant nonrecurring item reported in table III-9a, III-9b, and/or III-9d. Value (\$1,000)		
In-scope HFC components – non-recurring items reported in III-9a			
1. , classified as			
2. , classified as			
3. , classified as			
4. , classified as			
In-scope HFC components – non-recurring items reported in III-9b			
1. , classified as			
2. , classified as			
3. , classified as			
4. , classified as			
In-scope HFC blends – non-recurring items reported in III-9d			
1. , classified as			
2. , classified as			
3. , classified as			
4. , classified as			

III-11. **Classification of identified nonrecurring items (charges and gains) in the accounting books and records of the company.**--If nonrecurring items were reported in table III-10 above, please identify where your company recorded these items in your accounting books and records in the normal course of business; i.e., III-10 information designates where these items are reported in table III-9a, III-9b, and/or III-9d, respectively.

--

III-12. **Property, plant, and equipment and total assets.**--Report the property, plant, and equipment (PP&E) and total assets (i.e., both current and long-term assets) associated with the production, warehousing, and sale of in-scope HFC components and in-scope HFC blends, respectively. If your firm does not maintain some or all of the information necessary to report this information (specific to in-scope HFC components and in-scope HFC blends) in the normal course of business, please estimate this information based upon a method (such as production, sales, or costs) that is consistent with your firm’s relevant cost allocations in the preceding tables. Provide data as of the end of your firm’s three most recently completed fiscal years.

Note: PP&E and total assets should reflect net assets after any accumulated depreciation and allowances deducted. PP&E and total assets should be allocated to the subject products if they are also related to other products. Please provide a brief explanation if there are any substantial changes in PP&E and/or total assets during the period; e.g., due to asset write-offs, revaluation, and major purchases.

Value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
In-scope HFC components			
Property, plant, and equipment (net) ¹			
Total assets (net) ¹			
In-scope HFC blends			
Property, plant, and equipment (net) ²			
Total assets (net) ²			
¹ Describe nature of substantial changes in in-scope HFC components PP&E and total asset balance: _____ ² Describe nature of substantial changes in in-scope HFC blends PP&E and total asset balance: _____			

III-13. **Capital expenditures and research and development expenses.**--Report your firm's capital expenditures and research and development expenses on in-scope HFC components and in-scope HFC blends. Provide data for your firm's three most recently completed fiscal years.

Value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
In-scope HFC components			
Capital expenditures ¹			
Research and development expenses ²			
In-scope HFC blends			
Capital expenditures ³			
Research and development expenses ⁴			
¹ Please describe the nature, focus, and significance of your firm's capital expenditures on in-scope HFC components: _____ ² Please describe the nature, focus, and significance of your firm's R&D expenses related to in-scope HFC components: _____ ³ Please describe the nature, focus, and significance of your firm's capital expenditures on in-scope HFC blends: _____ ⁴ Please describe the nature, focus, and significance of your firm's R&D expenses related to in-scope HFC blends: _____			

III-14. **Data consistency and reconciliation.**--Please indicate whether your firm's financial data for questions III-9a, III-9b, III-9d, III-12, and III-13 are based on a calendar year or on your firm's fiscal year:

Calendar year	Fiscal year	Specify fiscal year
<input type="checkbox"/>	<input type="checkbox"/>	

Please note the relevant quantities and values reported in question III-9a (financial results on overall operations on in-scope HFC components) and III-9d (financial results on overall operations on in-scope HFC blends) should reconcile with data reported in question II-8 and II-9 (including export shipments) as long as they are reported on the same calendar year basis.

Do relevant data in question III-9a (financial results on overall operations on in-scope HFC components) and III-9d (financial results on overall operations on in-scope HFC blends) reconcile with data in question II-8 and II-9?

Yes	No	If no, please explain.
<input type="checkbox"/>	<input type="checkbox"/>	

III-15. **Effects of imports on investment.**--Since January 1, 2013, has your firm experienced any actual negative effects on its return on investment or the scale of capital investments as a result of imports of in-scope HFC blends and components from China?

No Yes--My firm has experienced actual negative effects as follows:

<i>(check as many as appropriate)</i>		<i>(please describe)</i>
<input type="checkbox"/>	Cancellation, postponement, or rejection of expansion projects	
<input type="checkbox"/>	Denial or rejection of investment proposal	
<input type="checkbox"/>	Reduction in the size of capital investments	
<input type="checkbox"/>	Return on specific investments negatively impacted	
<input type="checkbox"/>	Other	

III-16. **Effects of imports on growth and development.**--Since January 1, 2013, has your firm experienced any actual negative effects on its growth, ability to raise capital, or existing development and production efforts (including efforts to develop a derivative or more advanced version of the product) as a result of imports of in-scope HFC blends and components from China?

No Yes--My firm has experienced actual negative effects as follows:

<i>(check as many as appropriate)</i>		<i>(please describe)</i>
<input type="checkbox"/>	Rejection of bank loans	
<input type="checkbox"/>	Lowering of credit rating	
<input type="checkbox"/>	Problem related to the issue of stocks or bonds	
<input type="checkbox"/>	Ability to service debt	
<input type="checkbox"/>	Other	

III-17. **Anticipated effects of imports.**--Does your firm anticipate any negative effects due to imports of in-scope HFC blends and components from China?

No	Yes	If yes, my firm anticipates negative effects as follows:
<input type="checkbox"/>	<input type="checkbox"/>	

III-18. **Other explanations.**--If your firm would like to further explain a response to a question in Part III that did not provide a narrative box, please note the question number and the explanation in the space provided below. Please also use this space to highlight any issues your firm had in providing the data in this section, including but not limited to technical issues with the MS Word questionnaire.

--

PART IV.-- PRICING AND MARKET FACTORS

Further information on this part of the questionnaire can be obtained from Michele Breaux (202-205-2781, michele.breaux@usitc.gov).

IV-1. **Contact information.**--Please identify the individual that Commission staff may contact regarding the confidential information submitted in part IV.

Name	
Title	
Email	
Telephone	
Fax	

PRICE DATA

IV-2. This question requests quarterly quantity and value data for your firm’s commercial shipments to unrelated U.S. customers since January 1, 2013 of the following products produced by your firm.

Product 1.-- R-410A in bulk containers (1,000 lbs. or greater);

Product 2.-- R-410A in 25-lb. disposable tanks or cylinders;

Product 3.-- R-404A in 24-lb. disposable tanks or cylinders;

Product 4.-- R-407C in 25-lb. disposable tanks or cylinders;

Product 5.-- R-32 in bulk containers (1,000 lbs. or greater);

Product 6.-- R-125 in in bulk containers (over 1,000 lbs. or greater).

Please note that values should be f.o.b., U.S. point of shipment and should not include U.S.-inland transportation costs. Values should reflect the *final net* amount paid to your firm (i.e., should be net of all deductions for discounts or rebates).

During January 2013-December 2015, did your firm produce and sell to unrelated U.S. customers any of the above listed products (or any products that were competitive with these products)?

<input type="checkbox"/>	Yes. --Please complete the following pricing data table(s) as appropriate.
<input type="checkbox"/>	No. --Skip to question IV-3.

Note: As requested in Part I of this questionnaire, please keep all supporting documents/records used in the preparation of the price data, as Commission staff may contact your firm regarding questions on the price data. The Commission may also request that your company submit copies of the supporting documents/records (such as sales journal, invoices, etc.) used to compile these data.

IV-2a. **Price data.**--Report below the quarterly price data¹ for pricing products² produced and sold by your firm.

Report data in actual pounds and actual dollars (not 1,000s).

(Quantity in pounds , value in dollars)						
Period of shipment	Product 1		Product 2		Product 3	
	Quantity	Value	Quantity	Value	Quantity	Value
2013:						
January-March						
April-June						
July-September						
October-December						
2014:						
January-March						
April-June						
July-September						
October-December						
2015:						
January-March						
April-June						
July-September						
October-December						

¹ Net values (*i.e.*, gross sales values less all discounts, allowances, rebates, prepaid freight, and the value of returned goods), f.o.b. your firm's U.S. point of shipment.

² Pricing product definitions are provided on the first page of Part IV.

Note.--If your firm's product does not exactly meet the product specifications but is competitive with the specified product, provide a description of your firm's product. Also, please explain any anomalies in your firm's reported pricing data.

Product 1:

Product 2:

Product 3:

IV-2a. **Price data.**—*Continued*

Report below the quarterly price data¹ for pricing products² produced and sold by your firm.

Report data in actual pounds and actual dollars (not 1,000s).

(Quantity in pounds, value in dollars)						
Period of shipment	Product 4		Product 5		Product 6	
	Quantity	Value	Quantity	Value	Quantity	Value
2013:						
January-March						
April-June						
July-September						
October-December						
2014:						
January-March						
April-June						
July-September						
October-December						
2015:						
January-March						
April-June						
July-September						
October-December						

¹ Net values (*i.e.*, gross sales values less all discounts, allowances, rebates, prepaid freight, and the value of returned goods), f.o.b. your firm's U.S. point of shipment.

² Pricing product definitions are provided on the first page of Part IV.

Note.--If your firm's product does not exactly meet the product specifications but is competitive with the specified product, provide a description of your firm's product. Also, please explain any anomalies in your firm's reported pricing data.

Product 4:

Product 5:

Product 6:

IV-2b. **Pricing data methodology.**—Please describe the method and the kinds of documents/records that were used to compile your price data.

IV-2c. **Price data component country-of-origin.**--Report below the average share of total quantity of each individual in-scope HFC blend pricing products' (e.g., products 1 through 4) input HFC components by source.

Product	Percent total quantity over period (January 2013-December 2015)			Total (should sum to 100.0% across in each row)
	Domestic components ¹ (percent)	Components imported from China ¹ (percent)	Components imported from all other sources ¹ (percent)	
Product 1- R-410A in bulk containers (1,000 lbs. or greater)				0.0
Product 2- R-410A in 25-lb. disposable tanks or cylinders				0.0
Product 3- R-404A in 24-lb. disposable tanks or cylinders				0.0
Product 4- R-407C in 25-lb. disposable tanks or cylinders				0.0
¹ Count as domestic any inputs used by your firm with swapped merchandise if your firm gave its own domestic product for a component of foreign origin (knowingly or unknowingly). Count as foreign any inputs used by your firm (even if the actual component used was produced in the United States) if your firm procured the domestic component pursuant to swap arrangement in which you gave imported components.				

IV-3. **Price setting.**--How does your firm determine the prices that it charges for sales of in-scope HFC blends and/or in-scope HFC components (*check all that apply*)? If your firm issues price lists, please submit sample pages of a recent list.

	Transaction by transaction	Contracts	Set price lists	Other	If other, describe
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

IV-4. **Discount policy.**--Please indicate and describe your firm's discount policies (*check all that apply*).

	Quantity discounts	Annual total volume discounts	No discount policy	Other	Describe
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

IV-5. **Pricing terms.**--

(a) What are your firm's typical sales terms for its U.S.-produced in-scope HFC blends and/or in-scope HFC components?

	Net 30 days	Net 60 days	2/10 net 30 days	Other	Other (specify)
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

(b) On what basis are your firm's prices of domestic in-scope HFC blends and/or in-scope HFC components usually quoted (*check one*)?

	Delivered	F.o.b.	If f.o.b., specify point
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	

IV-6. **Contract versus spot.**--Approximately what share of your firm’s sales of its U.S.-produced in-scope HFC blends and/or in-scope HFC components in 2015 was on a (1) long-term contract basis, (2) annual contract basis, (3) short-term contract basis, and (4) spot sales basis?

Share of 2014 sales	Type of sale				Total (should sum to 100.0%)
	Long-term contracts (multiple deliveries for more than 12 months)	Annual contracts (multiple deliveries for 12 months)	Short-term contracts (multiple deliveries for less than 12 months)	Spot sales (for a single delivery)	
In-scope HFC components	%	%	%	%	0.0 %
In-scope HFC blends	%	%	%	%	0.0 %

IV-7. **Contract provisions.**—

(a) **In-scope HFC components.**--Please fill out the table regarding your firm’s typical sales contracts for U.S.-produced in-scope HFC components (or check “not applicable” if your firm does not sell on a long-term, short-term and/or annual contract basis).

Typical sales contract provisions	Item	Short-term contracts (multiple deliveries for less than 12 months)	Annual contracts (multiple deliveries for 12 months)	Long-term contracts (multiple deliveries for more than 12 months)
Average contract duration	<i># of days</i>		365	
Price renegotiation (during contract period)	<i>Yes</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>No</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fixed quantity and/or price	<i>Quantity</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Price</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Both</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet or release provision	<i>Yes</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>No</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV-7. **Contract provisions**--*Continued*

(b) **In-scope HFC blends**.--Please fill out the table regarding your firm's typical sales contracts for U.S.-produced in-scope HFC blends (or check "not applicable" if your firm does not sell on a long-term, short-term and/or annual contract basis).

Typical sales contract provisions	Item	Short-term contracts (multiple deliveries for less than 12 months)	Annual contracts (multiple deliveries for 12 months)	Long-term contracts (multiple deliveries for more than 12 months)
Average contract duration	<i># of days</i>		365	
Price renegotiation (during contract period)	<i>Yes</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>No</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fixed quantity and/or price	<i>Quantity</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Price</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Both</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meet or release provision	<i>Yes</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>No</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV-8. **Lead times**.--What is your firm's share of sales from inventory and produced to order and what is the typical lead time between a customer's order and the date of delivery for your firm's sales of its U.S.-produced in-scope HFC blends and/or in-scope HFC components?

Source	Share of 2015 sales	Lead time (average number of days)
In-scope HFC components		
From inventory	%	
Produced to order	%	
Total (should sum to 100.0%)	0.0 %	
In-scope HFC blends		
From inventory	%	
Produced to order	%	
Total (should sum to 100.0%)	0.0 %	

IV-9. Shipping information.--

- (a) What is the approximate percentage of the total delivered cost of U.S.-produced in-scope HFC blends and/or in-scope HFC components that is accounted for by U.S. inland transportation costs? _____ percent

- (b) Who generally arranges the transportation to your firm’s customers’ locations?
 Your firm Purchaser (*check one*)

- (c) Indicate the approximate percentage of your firm’s sales of in-scope HFC blends and/or in-scope HFC components that are delivered the following distances from its production facility.

Distance from production facility	Share
Within 100 miles	%
101 to 1,000 miles	%
Over 1,000 miles	%
Total (should sum to 100.0%)	0.0 %

- IV-10. **Geographical shipments.**-- In which U.S. geographic market area(s) has your firm sold its U.S.-produced in-scope HFC blends and/or in-scope HFC components since January 1, 2013 (check all that apply)?

Geographic area	√ if applicable
Northeast. —CT, ME, MA, NH, NJ, NY, PA, RI, and VT.	<input type="checkbox"/>
Midwest. —IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, and WI.	<input type="checkbox"/>
Southeast. —AL, DE, DC, FL, GA, KY, MD, MS, NC, SC, TN, VA, and WV.	<input type="checkbox"/>
Central Southwest. —AR, LA, OK, and TX.	<input type="checkbox"/>
Mountains. —AZ, CO, ID, MT, NV, NM, UT, and WY.	<input type="checkbox"/>
Pacific Coast. —CA, OR, and WA.	<input type="checkbox"/>
Other. —All other markets in the United States not previously listed, including AK, HI, PR, and VI, among others.	<input type="checkbox"/>

IV-11. **End uses.**—*Continued*

(b) **Cost share.**--For each end-use product, what percentage of the total cost is accounted for by in-scope HFC blends and other inputs?

End use product	Share of total cost of end use product accounted for by		Total (should sum to 100.0% across)
	In-scope HFC blends	Other inputs	
Residential a/c units and heat pumps	%	%	0.0 %
Commercial a/c units	%	%	0.0 %
Commercial refrigeration units	%	%	0.0 %
Transport refrigeration units	%	%	0.0 %
Process refrigeration units	%	%	0.0 %
Other ¹	%	%	0.0 %
¹ Explain the other end uses: _____.			

IV-12. **Substitutes.**—

(a) **Component substitutes.**-- Can other products be substituted for in-scope HFC components?

No Yes--Please fill out the table.

Substitute	In-scope HFC component replaced	Direct Replacement?		Explain, noting if any changes to equipment are needed.	Have changes in the price of this substitute affected the price for in-scope components?		
		No	Yes		No	Yes	Explanation
1.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
2.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
3.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

IV-12. **Substitutes.**—*Continued*

(b) **Blend substitutes.**-- Can other products be substituted for in-scope HFC blends?

No

Yes--Please fill out the table.

Substitute	In-scope HFC blend replaced	Direct Replacement?		Explain, noting if any changes to equipment are needed.	Have changes in the price of this substitute affected the price for in-scope blends?		
		No	Yes		No	Yes	Explanation
1.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
2.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	
3.		<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	

IV-13. **Demand trends.**-- Indicate how demand within the United States and outside of the United States (if known) for in-scope HFC blends and/or in-scope HFC components has changed since January 1, 2013. Explain any trends and describe the principal factors that have affected these changes in demand.

Market	Overall increase	No change	Overall decrease	Fluctuate with no clear trend	Explanation and factors
In-scope HFC components					
Within the United States	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outside the United States	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends					
Within the United States	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Outside the United States	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

IV-14. **Product changes.**--Have there been any significant changes in the product range, product mix, or marketing of in-scope HFC blends and/or in-scope HFC components since January 1, 2013?

No	Yes	If yes, please describe and quantify if possible.
<input type="checkbox"/>	<input type="checkbox"/>	

IV-15. **Conditions of competition.**--

(a) Is the market for in-scope HFC blends and/or in-scope HFC components subject to business cycles (other than general economy-wide conditions) and/or other conditions of competition distinctive to in-scope HFC blends and/or in-scope HFC components? If yes, describe.

Check all that apply.	Please describe.
In-scope HFC components	
<input type="checkbox"/> No	
<input type="checkbox"/> Yes-Business cycles (e.g. seasonal business)	
<input type="checkbox"/> Yes-Other distinctive conditions of competition	
In-scope HFC blends	
<input type="checkbox"/> No	
<input type="checkbox"/> Yes-Business cycles (e.g. seasonal business)	
<input type="checkbox"/> Yes-Other distinctive conditions of competition	

(b) If yes, have there been any changes in the business cycles or conditions of competition for in-scope HFC blends and/or in-scope HFC components since January 1, 2013?

	No	Yes	If yes, describe.
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	

IV-16. **Supply constraints.**--Has your firm refused, declined, or been unable to supply in-scope HFC blends and/or in-scope HFC components since January 1, 2013 (examples include placing customers on allocation or "controlled order entry," declining to accept new customers or renew existing customers, delivering less than the quantity promised, been unable to meet timely shipment commitments, etc.)?

	No	Yes	If yes, please describe.
In-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	
In-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	

IV-17. **Raw materials.**--How have raw material prices for in-scope HFC blends and in-scope HFC components changed since January 1, 2013?

Overall increase	No change	Overall decrease	Fluctuate with no clear trend	Explain, noting how raw material price changes have affected your firm's selling prices for in-scope HFC blends and in-scope HFC component.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

IV-18. **Interchangeability**--Are in-scope HFC blends and/or in-scope HFC components produced in the United States and in other countries interchangeable (*i.e.*, can they physically be used in the same applications)?

Please indicate A, F, S, N, or O in the table below:

A = the products from a specified country-pair are *always* interchangeable

F = the products are *frequently* interchangeable

S = the products are *sometimes* interchangeable

N = the products are *never* interchangeable

O = *no familiarity* with products from a specified country-pair

Country-pair ¹		In-scope HFC Components		In-scope HFC blends	
		China	Other Countries	China	Other Countries
In-scope HFC Components	United States			X	
	China	X			
In-scope HFC blends	United States	X			
	China			X	

¹ Country comparisons between products of the United States, China, and other countries should be made on a component by component or blend by blend basis.

For any country-pair producing products that is *sometimes* or *never* interchangeable, identify the country-pair and explain the factors that limit or preclude interchangeable use:

IV-19. **Factors other than price.**--Are differences other than price (*e.g.*, quality, availability, transportation network, product range, technical support, *etc.*) between in-scope HFC blends and/or in-scope HFC components produced in the United States and in other countries a significant factor in your firm's sales of the products?

Please indicate A, F, S, N, or O in the table below:

A = such differences are *always* significant

F = such differences are *frequently* significant

S = such differences are *sometimes* significant

N = such differences are *never* significant

O = *no familiarity* with products from a specified country-pair

Country-pair ¹		In-scope HFC Components		In-scope HFC blends	
		China	Other Countries	China	Other Countries
In-scope HFC Components	United States			X	
	China	X			
In-scope HFC blends	United States	X			
	China			X	

¹ Country comparisons between products of the United States, China, and other countries should be made on a component by component or blend by blend basis.

For any country-pair producing products that is *sometimes* or *never* interchangeable, identify the country-pair and explain the factors that limit or preclude interchangeable use:

IV-20. **Customer identification.**--List the names and contact information for your firm's 10 largest U.S. customers for in-scope HFC blends and/or in-scope HFC components since January 1, 2013. Indicate the share of the quantity of your firm's total shipments of in-scope HFC blends and components that each of these customers accounted for in 2015.

	Customer's name	Contact person	Email	Telephone	City	State	Share of 2105 sales (%)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

IV-21. **Competition from imports.**—

(a) **Lost revenue.**--Since January 1, 2013: To avoid losing sales to competitors selling in-scope HFC blends and/or in-scope HFC components from China, did your firm:

	No	Yes
Reduce prices	<input type="checkbox"/>	<input type="checkbox"/>
Roll back announced price increases	<input type="checkbox"/>	<input type="checkbox"/>

(b) **Lost sales.**--Since January 1, 2013: Did your firm lose sales of in-scope HFC blends and components to imports of in-scope HFC blends and/or in-scope HFC components from China?

No	Yes
<input type="checkbox"/>	<input type="checkbox"/>

IV-22. **Other explanations**--If your firm would like to further explain a response to a question in Part IV that did not provide a narrative response box, please note the question number and the explanation in the space provided below. Please also use this space to highlight any issues your firm had in providing the data in this section, including but not limited to technical issues with the MS Word questionnaire.

--

PART V.—ADDITIONAL PRODUCT INFORMATION

V-1. **Semi-finished analysis.**--For each of the following individual HFC components, provide the requested assessments. If you do not have the knowledge to be able to respond this question, please leave it blank.

- (a) **Uses in addition to in-scope HFC blend production.**--Indicate whether each individual HFC component is dedicated to the production of in-scope HFC blends or has uses in addition to the production of downstream in-scope HFC blends. If there are uses for an individual HFC component other than for the production of in-scope HFC blends, please list these other uses. If any in-scope HFC component can be sold as an individual component, provide that information in the explanation section of the table below.

HFC component	No.--Dedicated	Yes.--Other uses	Explanation (if yes).--Describe the other uses
R-32	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-125	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-143a	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-134a (out-of-scope)	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____

- (b) **Differences in markets.**--Are the markets for HFC components, to the degree that the individual HFC components are sold commercially, separate and/or distinct from the market(s) for the downstream **in-scope HFC blends**? If there are differences in the markets, please describe them in the space provided. (If there are no markets for the individual HFC component, leave blank).

HFC component	No.--Similar market(s)	Yes.--Separate/distinct market(s)	Explanation (if yes).--Describe the differences
R-32	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-125	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-143a	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-134a (out-of-scope)	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____

V-1. **Semi-finished analysis.**--Continued

(c) **Similar physical characteristics and functions.**--Are there distinct physical characteristics and functions of HFC components and the **in-scope HFC blends**?

HFC component	No.— Similar	Yes.— Distinct	Explanation (if yes).—Describe the distinct physical characteristics and functions
R-32	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-125	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-143a	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-134a (out-of-scope)	<input type="checkbox"/>	<input type="checkbox"/>	_____

(d) **Differences in price or value.**--Are there differences in the price for or value of the individual HFC components and the the downstream **in-scope HFC blends**?

HFC component	No.— Similar price/value	Yes.— Divergent price/value	Explanation (if yes).—Describe the differences in and drivers of price/value
R-32	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-125	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-143a	<input type="checkbox"/>	<input type="checkbox"/>	_____
R-134a (out-of-scope)	<input type="checkbox"/>	<input type="checkbox"/>	_____

V-1. **Semi-finished analysis.**—*Continued*

(e) **Extensive process to convert to in-scope HFC blend.**--Is the process to create a in-scope HFC blend from the individual HFC component extensive and/or complicated?

HFC component	No.— Simple	Yes.— Extensive/ complicated	Explanation (if yes).—Describe the complexities of creating a in-scope HFC blend
R-32	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-125	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-143a	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____
R-134a (out-of-scope)	<input type="checkbox"/>	<input type="checkbox"/>	_____ _____

V-2. **Comparability of in-scope HFC blends vs out-of-scope refrigerant blends.**--For each of the following indicate whether in-scope HFC blends and out-of-scope refrigerant blends are: fully comparable or the same, *i.e.*, have no differentiation between them; mostly comparable or similar; somewhat comparable or similar; never or not-at-all comparable or similar; or no familiarity with products. If there are differences between individual in-scope HFC blends and individual out-of-scope refrigerant blends please provide that information in the narrative fields.

(a) **Characteristics and Uses.**--How comparable are in-scope HFC blends and out-of-scope refrigerant blends in physical characteristics and end uses?

Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their characteristics and uses:

(b) **Interchangeability.**--How substitutable are in-scope HFC blends and out-of-scope refrigerant blends in the same application?

Fully interchangeable	Mostly interchangeable	Somewhat interchangeable	Not at all interchangeable	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their interchangeability:

V-2. **Comparability of in-scope HFC blends vs out-of-scope refrigerant blends.**--Continued

(c) **Manufacturing facilities, production processes, and production employees.**--Are in-scope HFC blends and out-of-scope refrigerant blends manufactured using the same facilities, the same inputs, the same machinery and equipment, and the same employees?

Fully the same	Mostly the same	Somewhat the same	Not at all the same	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their manufacturing processes:

(d) **Channels of distribution.**--Compare the channels of distribution/market situation through which in-scope HFC blends and out-of-scope refrigerant blends are sold (i.e., sold direct to end users, through distributors, etc.).

Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their channels of distribution:

V-2. **Comparability of in-scope HFC blends vs out-of-scope refrigerant blends.**--Continued

(e) **Customer and producer perceptions.**--How do customers and producers view the comparability of in-scope HFC blends and out-of-scope refrigerant blends in the market (e.g., sales/marketing practices, end uses)?

Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their customer and producer perceptions:

(f) **Price.**--Are prices comparable or different for in-scope HFC blends and out-of-scope refrigerant blends?

Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their prices:

V-3. **Additional product info: Out-of-scope refrigerant blends.**--Report your firm's production capacity, production, shipments, inventories, and financial data related to out-of-scope refrigerant blends (including but not limited to out-of-scope HFC, HCFC/CFC, or HFO blends) in its U.S. establishment(s) during the specified periods. Quantity are being requested in **POUNDS** not short tons due to lower volume of merchandise in this category.

OUT-OF-SCOPE REFRIGERANT BLENDS

Quantity (pounds) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Average production capacity¹ (quantity) (A)			
Beginning-of-period inventories (quantity) (B)			
Production (quantity) (C)			
U.S. shipments:			
Commercial shipments:²			
Quantity (D)	0	0	0
Value (E)	0	0	0
Internal consumption:			
Quantity (F)			
Value ³ (G)			
Transfers to related firms:			
Quantity (H)			
Value ³ (I)			
Export shipments:⁴			
Quantity (J)			
Value (K)			
End-of-period inventories⁴ (quantity) (L)			
Net sales quantities			
Net sales value			
Cost of goods sold (value)			
Gross profit or (loss) (value)	0	0	0
SG&A expenses (value)			
Operating income or (loss) (value)	0	0	0
Capital expenditures (value)			
Research and development expenses (value)			
Net end of period assets (value)			

¹ The production capacity reported is based on operating _____ hours per week, _____ weeks per year. Please describe the methodology used to calculate production capacity, and explain any changes in reported capacity _____.

² Internal consumption and transfers to related firms must be valued at fair market value. In the event that your firm uses a different basis for valuing these transactions, please specify that basis (e.g., cost, cost plus, etc.) and provide value data using that basis for each of the periods noted above: _____.

³ Identify your firm's principal export markets: _____.

RECONCILIATION OF SHIPMENTS, PRODUCTION, AND INVENTORY.--Generally, the data reported for the end-of-period inventories (i.e., line L) should be equal to the beginning-of-period inventories (i.e., line B), plus production (i.e., line C), less total shipments (i.e., lines D, F, H, and J). Please ensure that any differences are not due to data entry errors in completing this form, but rather actually reflect your firm's records; and also provide any likely explanations for any differences (e.g., theft, loss, damage, record systems issues, etc.) if they exist.

Reconciliation	Calendar years		
	2013	2014	2015
B + C – D – F – H – J – L = should equal zero ("0") or provide an explanation. ¹	0	0	0
¹ Explanation if the calculated fields above are returning values other than zero (i.e., "0") but are nonetheless accurate: _____.			

V-4. **Channels of distribution.**--Report your firm's commercial U.S. shipments of out-of-scope refrigerant blends by channel of distribution.

OUT-OF-SCOPE REFRIGERANT BLENDS

Quantity (pounds) and value (in \$1,000)			
Item	Calendar years		
	2013	2014	2015
Channels of distribution:			
Commercial U.S. shipments:			
Sold to <u>Sold to distributors and service companies and/or to equipment owners/end users:</u>			
Quantity (V)			
Value (W)			
Sold to <u>blenders/repackagers:</u>			
Quantity (X)			
Value (Y)			
Sold to <u>original equipment manufacturers:</u>			
Quantity (Z)			
Value (AA)			

V-5. **Individual out-of-scope refrigerant blends reported in question V-3 and V-4.**--Please check which out-of-scope refrigerant blends accounted for the data reported by your firm in question V-3 and V-4.

<input type="checkbox"/>	R-407B	<input type="checkbox"/>	R-422A	<input type="checkbox"/>	R-442A
<input type="checkbox"/>	R-407D	<input type="checkbox"/>	R-422B	<input type="checkbox"/>	R-444A
<input type="checkbox"/>	R-407E	<input type="checkbox"/>	R-422C	<input type="checkbox"/>	R-445A
<input type="checkbox"/>	R-407F	<input type="checkbox"/>	R-422D	<input type="checkbox"/>	R-448A
<input type="checkbox"/>	R-408A	<input type="checkbox"/>	R-422E	<input type="checkbox"/>	R-449A
<input type="checkbox"/>	R-410B	<input type="checkbox"/>	R-423A	<input type="checkbox"/>	R-449B
<input type="checkbox"/>	R-413A	<input type="checkbox"/>	R-424A	<input type="checkbox"/>	R-450A
<input type="checkbox"/>	R-416A	<input type="checkbox"/>	R-425A	<input type="checkbox"/>	R-451A
<input type="checkbox"/>	R-417A	<input type="checkbox"/>	R-426A	<input type="checkbox"/>	R-451B
<input type="checkbox"/>	R-417B	<input type="checkbox"/>	R-427A	<input type="checkbox"/>	R-452A
<input type="checkbox"/>	R-417C	<input type="checkbox"/>	R-428A	<input type="checkbox"/>	R-453A
<input type="checkbox"/>	R-419A	<input type="checkbox"/>	R-434A	<input type="checkbox"/>	R-454A
<input type="checkbox"/>	R-419B	<input type="checkbox"/>	R-437A	<input type="checkbox"/>	R-454B
<input type="checkbox"/>	R-420A	<input type="checkbox"/>	R-438A	<input type="checkbox"/>	R-504
<input type="checkbox"/>	R-421A	<input type="checkbox"/>	R-439A	<input type="checkbox"/>	R-512A
<input type="checkbox"/>	R-421B	<input type="checkbox"/>	R-440A	<input type="checkbox"/>	R-513A
<input type="checkbox"/>	Other out-of-scope refrigerant blends ¹				
¹ Please name the individual out-of-scope refrigerant blends not otherwise provided in the list above that are included in questions V-3 and V-4 _____.					

V-6. **Comparability of out-of-scope HFC component R-134a with either in-scope HFC components or in-scope HFC blends.**--For each of the following indicate whether out-of-scope HFC component R-134a and either in-scope HFC components or in-scope HFC blends are: fully comparable or the same, *i.e.*, have no differentiation between them; mostly comparable or similar; somewhat comparable or similar; never or not-at-all comparable or similar; or no familiarity with products. If there are differences between R-134a and either in-scope HFC components or in-scope HFC blends, please provide that information in the narrative fields.

(a) **Characteristics and Uses.**--How comparable is R-134a with either in-scope HFC components or in-scope HFC blends in physical characteristics and end uses?

Comparison	Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their characteristics and uses:

(b) **Interchangeability.**--How substitutable are R-134a and either in-scope HFC components or in-scope HFC blends in the same application?

Comparison	Fully interchangeable	Mostly interchangeable	Somewhat interchangeable	Not at all interchangeable	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their interchangeability:

V-6. **Comparability of out-of-scope HFC component R-134a with either in-scope HFC components or in-scope HFC blends.**--*Continued*

(c) **Manufacturing facilities, production processes, and production employees.**--Are R-134a and either in-scope HFC components or in-scope HFC blends manufactured using the same facilities, same inputs, same machinery and equipment, and same employees?

Comparison	Fully the same	Mostly the same	Somewhat the same	Not at all the same	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their manufacturing processes:

(d) **Channels of distribution.**--Compare the channels of distribution/market situation through which R-134a and either in-scope HFC components or in-scope HFC blends are sold (i.e., sold direct to end users, through distributors, etc.).

Comparison	Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their channels of distribution:

V-6. **Comparability of out-of-scope HFC component R-134a with either in-scope HFC components or in-scope HFC blends.**--Continued

(e) **Customer and producer perceptions.**--How do customers and producers view the comparability of R-134a and either in-scope HFC components or in-scope HFC blends in the market (*e.g.*, sales/marketing practices, end uses)?

Comparison	Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their customer and producer perceptions:

(f) **Price.**--Are prices comparable or different for R-134a and either in-scope HFC components or in-scope HFC blends?

Comparison	Fully comparable	Mostly comparable	Somewhat comparable	Not at all comparable	NA/no familiarity
R-134a vs in-scope HFC components	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R-134a vs in-scope HFC blends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide a narrative discussion for the comparability ratings you provided in terms of their prices:

Note.--Part II-8 included data on swaps, commercial shipments, internal consumption, transfers to related firms, export shipments, and inventories of R-134a. Data reported in question V-7a below should generally correspond to the same data reported in part II-8.

V-7a. **Operations on out-of-scope HFC component R-134a.**--Report the revenue and related cost information requested below on the out of scope HFC component R-134a operations of your firm's U.S. establishment(s), as well as corresponding capital expenditures and R&D expenses.¹ Do not report resales of products. Transfers to related firms, internal consumption, and swaps (from the perspective of relevant R-134a given up in exchange) must be valued at fair market value. Input purchases from related suppliers should be consistent with and based on information in the firm's accounting books and records. Provide data for your firm's three most recently completed fiscal years. If your firm was involved in out of scope HFC component R-134a tolling operations (either as the toller or as the tollee), please **contact David Boyland at (202)708-4725** before completing this section of the questionnaire.

Quantity (<i>in short tons</i>) and value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
Net sales quantities: ²			
Commercial sales ("CS")	0	0	0
Transfers to related firms ("Transfers")	0	0	0
Internal consumption ("IC")	0	0	0
Swaps	0	0	0
Total net sales quantities	0	0	0
Net sales values: ²			
Commercial sales	0	0	0
Transfers to related firms	0	0	0
Internal consumption	0	0	0
Swaps	0	0	0
Total net sales values	0	0	0
Cost of goods sold (COGS): ³			
Raw materials	0	0	0
Direct labor	0	0	0
Other factory costs ⁴	0	0	0
Total COGS	0	0	0
Gross profit or (loss)	0	0	0
Selling, general, and administrative (SG&A) expenses:			
Selling expenses	0	0	0
General and administrative expenses	0	0	0
Total SG&A expenses	0	0	0
Operating income (loss)	0	0	0
Other expenses and income:			
Interest expense	0	0	0
All other expense items	0	0	0
All other income items ⁴	0	0	0
Net income or (loss) before income taxes	0	0	0
Depreciation/amortization included above	0	0	0

Table continued on following page.

V-7a. **Operations on out-of-scope HFC component R-134a.--Continued**

¹ Include only relevant revenue items (whether domestic or export) and costs related to your U.S. manufacturing operations.

² Less discounts, returns, allowances, and prepaid freight. The quantities and values should approximate the corresponding shipment quantities and values reported in Part II of this questionnaire.

³ To the extent applicable (and whether associated with domestic or export revenue items), COGS should include costs associated with CS, Transfers, IC, and swaps (i.e., the relevant cost of R-134a given up in exchange and recognized in COGS).

⁴ Please report relevant by-product revenue related to R-134a component operations as an offset to other factory costs, as opposed to a component of other income.

Capital expenditures	0	0	0
Research and development expenses	0	0	0

V-7b. Operations on out-of-scope HFC component R-134a – U.S. commercial shipments and exports only (“open market sales”).--Report the revenue and related cost information requested below on the out of scope HFC component R-134a operations of your firm’s U.S. establishment(s).¹ Include both domestic and export commercial sales of the out of scope HFC component R-134a your firm produced, but do not report resales of products. Input purchases from related suppliers should be consistent with and based on information in the firm’s accounting books and records. Provide data for your firm’s three most recently completed fiscal years. If your firm was involved in out of scope HFC component R-134a tolling operations (either as the toller or as the tollee), please contact David Boyland at (202)708-4725 before completing this section of the questionnaire.

Quantity (in short tons) and value (in \$1,000)			
Item	Fiscal years ended--		
	2013	2014	2015
Net sales quantities: ²			
Commercial sales (“CS”)	0	0	0
Net sales values: ²			
Commercial sales	0	0	0
Cost of goods sold (COGS): ³			
Primary raw materials	0	0	0
Direct labor	0	0	0
Other factory costs ⁴	0	0	0
Total COGS	0	0	0
Gross profit or (loss)	0	0	0
Selling, general, and administrative (SG&A) expenses:			
Selling expenses	0	0	0
General and administrative expenses	0	0	0
Total SG&A expenses	0	0	0
Operating income (loss)	0	0	0
Other expenses and income:			
Interest expense	0	0	0
All other expense items	0	0	0
All other income items	0	0	0
Net income or (loss) before income taxes	0	0	0
Depreciation/amortization included above	0	0	0

¹ Include only relevant revenue items (whether domestic or export) and costs related to your U.S. manufacturing operations.
² Less discounts, returns, allowances, and prepaid freight. The quantities and values should approximate the corresponding shipment quantities and values reported in Part II of this questionnaire. Commercial sales quantities and commercial sales values reported here will be populated from data entered into question V-7a.
³ COGS (whether for domestic or export sales) should include costs associated with open market sales only. Costs associated with input purchases from related suppliers should be consistent with and based on information in the firm’s accounting books and records.
⁴ Please report relevant by-product revenue as an offset to other factory costs, as opposed to a component of other income.

Note -- The table above contains calculations that will appear when you have entered data in the MS Word form fields.

HOW TO FILE YOUR QUESTIONNAIRE RESPONSE

This questionnaire is available as a “fillable” form in MS Word format on the Commission’s website at:

https://www.usitc.gov/investigations/701731/2016/hydrofluorocarbon_blends_and_components_china/final.htm

Please do not attempt to modify the format or permissions of the questionnaire document. Please submit the completed questionnaire using one of the methods noted below. If your firm is unable to complete the MS Word questionnaire or cannot use one of the electronic methods of submission, please contact the Commission for further instructions.

- **Upload via Secure Drop Box.**—Upload the MS Word questionnaire along with a scanned copy of the signed certification page (page 1) through the Commission’s secure upload facility:

Web address: <https://dropbox.usitc.gov/oinv/> **Pin:** 1279

- **E-mail.**—E-mail the MS Word questionnaire to joanna.lo@usitc.gov; include a scanned copy of the signed certification page (page 1). *Please note that submitting your questionnaire by e-mail may subject your firm’s business proprietary information to transmission over an unsecure environment and to possible disclosure. If you choose this option, the Commission warns you that any risk involving possible disclosure of such information is assumed by the submitter and not by the Commission.*

If your firm does not produce or reclaim HFC blends, HFC components, and/or other refrigerant blends in the United States, please fill out page 1, print, sign, and submit a scanned copy to the Commission.

Parties to this proceeding.—If your firm is a party to this proceeding, it is required to serve a copy of the completed questionnaire on parties to the proceeding that are subject to administrative protective order (see 19 CFR § 207.7). A list of such parties may be obtained from the Commission’s Secretary (202-205-1803). A certificate of service must accompany the completed questionnaire you submit (see 19 CFR § 207.7). Service of the questionnaire must be made in paper form.