

EPA's Summary Tables for 2007 Company Progress Reports

<http://epa.gov/oppt/pfoa/pubs/preports.htm>

Table 1 - Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U. S. Operations (cumulative reductions from baseline year through end of 2006)

Company	Chemical Category	Emissions		Product Content		
		Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	PFOA and Higher Homologues	> 1,000 - 10,000	For FP Production: (> 0.1 - 1) kg / 100 kg	> 500 - 1,000	> 70 - 150	Not Applicable
	Precursors	Not Applicable				
Asahi	PFOA and Higher Homologues	4,922	For FP Production: < 1 kg / 100 kg	500 - 1,570	0.12	Not Applicable
	Precursors	Not Applicable				
Ciba	PFOA	0.05 kg (total for emissions and product content)				
	Higher Homologues	0.05 kg (total for emissions and product content)				
	Precursors	0 kg (total for emissions and product content)				
Clariant	Not Applicable					
Daikin ^a	PFOA	CBI	For FP Production: 8.0 x 10 ⁻³ kg / 100 kg	280	Plastics: 2 Elastomers: 300	0.28 (wet-weight basis)
			For Telomer Production: 6.4 x 10 ⁻⁷ kg / 100 kg			
	Precursor and Higher Homologues	CBI	For Telomer Production: 0.027 kg / 100 kg	Not Applicable	Not Applicable	2,500 (wet-weight basis)

Company	Chemical Category	Emissions		Product Content		
		Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
DuPont	PFOA, PFOA Salts	1,100	Not Reported	547	69	246 kg (global total product content in all product produced)
	Direct Precursors (C8 Telomer A Iodide and the 8-2-8 Telomer B alcohol ester of PFOA)	CBI	Not Reported	Not Applicable	Not Applicable	57 kg ^b (global total product content in all products produced)
3M/Dyneon	PFOA	0	0	0	Not Applicable	Not Applicable
Solvay Solexis	PFOA and PFOA Salts	Not Applicable	Not Applicable	600 - 700	Not Applicable	Not Applicable
	Higher Homologues	> 1,000 - 10,000	For FP Production: 0.161 kg/100 kg	Not Applicable	170 - 200	Not Applicable
	Precursors	Not Applicable		0	Not Applicable	Not Applicable

Table 2 - Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U. S. Operations

Company	Chemical Category	Emissions		Product Content		
		Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	PFOA and Higher Homologues	> 1,000 - 10,000	For FP Production: (> 0.1 - 1) kg / 100 kg	Not Applicable	> 70 - 150	Not Applicable
	Precursors	Not Applicable				
Asahi	PFOA and Higher Homologues	6,036	For FP Production: < 1 kg / 100 kg	1,144 (< 30 - 2900)	18	Not Applicable ^c
	Precursors	3,179	For Telomer Production: < 1 kg / 100 kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba	PFOA	30 kg (total for emissions and product content)				
	Higher Homologues	34 kg (total for emissions and product content)				
	Precursors	1013 kg (total for emissions and product content)				
Clariant	PFOA and PFOA Salts	1	For Telomer Production: 3.0×10^{-5} kg / 100 kg	Not Applicable	Not Applicable	2 kg (total product content)
	Direct Precursors	< 5	For Telomer Production: 1.0×10^{-4} kg / 100 kg	Not Applicable	Not Applicable	58 kg (total product content)

Company	Chemical Category	Emissions		Product Content		
		Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Daikin	PFOA	CBI	For FP Production: 0.026 kg / 100 kg	480	120	0.31 (wet-weight basis)
			For Telomer Production: 5.2×10^{-6} kg / 100 kg			
	Precursor and Higher Homologues	CBI	For Telomer Production: 0.021 kg / 100 kg	Not Applicable	Not Applicable	2,300 (wet-weight basis)
DuPont	PFOA, PFOA Salts	2,600	Not Reported	775	0 ppb	246 kg ^d (global total product content in all product produced)
	Direct Precursors (C8 Telomer A Iodide and the 8-2-8 Telomer B alcohol ester of PFOA)	Not Reported	Not Reported	Not Applicable	Not Applicable	57 kg (global total product content in all products produced)
3M / Dyneon	PFOA	3,700	For FP Production: < 1 kg / 100 kg	130	Not Applicable	Not Applicable

Company	Chemical Category	Emissions		Product Content		
		Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Solvay Solexis		Not Applicable				

Table 3 – Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U. S. Operations (cumulative percent reductions from baseline year through end of 2006)

Company	Chemical Category	% Reduction in Emissions	% Reduction in Product Content ^e		
		% Reductions in total quantity of chemical(s) released from baseline year	Dispersions	Other Fluoropolymers	Telomers
Arkema	PFOA and Higher Homologues	22%	0%	30%	Not Applicable
	Precursors	Not Applicable			
Asahi	PFOA, PFOA Salts, and Higher Homologues	6%	12%	Not Applicable ^f	Not Applicable
	Precursors	Not Applicable			
Ciba	PFOA	>99% (total for emissions and total mass of product present in the entire amount of product)			
	Higher Homologues	>99% (total for emissions and total mass of product present in the entire amount of product)			
	Precursors	>99% (total for emissions and total mass of product present in the entire amount of product)			
Clariant		Not Applicable			
Daikin ^g	PFOA	94% for fluoropolymer production 92% for telomer production	34%	0%	72%

Company	Chemical Category	% Reduction in Emissions	% Reduction in Product Content ^e		
		% Reductions in total quantity of chemical(s) released from baseline year	Dispersions	Other Fluoropolymers	Telomers
	Precursor and Higher Homologues	22% for telomer production	Not Applicable	Not Applicable	78%
DuPont	PFOA, PFOA Salts	98%	44%	80%	50% (total mass of chemical(s) that is present in the total amount of product produced in U.S. and non-U.S. sites)
	Precursors	CBI	Not Applicable	Not Applicable	14% (total mass of chemical(s) that is present in the total amount of product produced in U.S. and non-U.S. sites)
3M/Dyneon	PFOA	100%	100%	Not Reported	Not Applicable
Solvay Solexis	PFOA and PFOA Salts	Not Applicable	59%	Not Applicable	Not Applicable
	Higher Homologues	28%	Not Applicable	0%	Not Applicable
	Precursors	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Table 4 – Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U. S. Operations (cumulative percent reductions from baseline year through end of 2006)

Company	Chemical Category	% Reduction in Emissions	% Reduction in Product Content ^h		
		% Reductions in total quantity of chemical(s) released from baseline year	Dispersions	Other Fluoropolymers	Telomers
Arkema	PFOA and Higher Homologues	CBI			
	Precursors	Not Applicable			
Asahi	PFOA, PFOA Salts, and Higher Homologues	39%	23%	Not Applicable ⁱ	Not Applicable ⁱ
	Precursors	20%	Not Applicable	Not Applicable	18%
Ciba	PFOA	94%			
	Higher Homologues	91%			
	Precursors	An increase of 131%			
Clariant	PFOA and PFOA Salts	90%	Not Applicable	Not Applicable	35% (total mass of chemical(s) that is present in the total amount of product produced)
	Direct Precursors	0-10%	Not Applicable	Not Applicable	40% (total mass of chemical(s) that is present in the total amount of product produced)

Company	Chemical Category	% Reduction in Emissions	% Reduction in Product Content ^h		
		% Reductions in total quantity of chemical(s) released from baseline year	Dispersions	Other Fluoropolymers	Telomers
Daikin ^k	PFOA	90% for fluoropolymer production 39% for telomer production	76%	16%	69%
	Precursor and Higher Homologues	38% for telomer production	Not Applicable	Not Applicable	78%
DuPont	PFOA, PFOA Salts	86%	25%	100%	50% (total mass of chemical(s) that is present in the total amount of product produced in U.S. and non-U.S sites.)
	Direct Precursors	Not Reported	Not Applicable	Not Applicable	14% (total mass of chemical(s) that is present in the total amount of product produced in U.S. and non-U.S. sites)
3M / Dyneon	PFOA	74%	91% (total mass)	Not Applicable	Not Applicable
Solvay Solexis	Not Applicable				

Notes:

- “Not Applicable”: indicates that the data element did not apply to the specific company's operations in the area covered by the table.
- “Not Reported”: indicates that the company did not provide a figure for the specific data element.
- “CBI”: data is claimed as confidential business information.

^a % reduction in emissions for Daikin is reported for % reduction in ratios of (kg of release / kg of product produced).

^b Year-end run rates

^c The quantity of PFOA, PFOA salts and higher homologues in telomer based products and other fluoropolymers that are produced in non-US operations was reported by Asahi as being negligible as compared to the quantity of precursors in those same products.

^d Year-end run rates

^e All values refer to reductions in the concentration of the chemical(s) in the product except where noted that the reduction refers to the reduction in total mass of chemical(s) that is present in the total amount of product produced.

^f The quantity of PFOA, PFOA salts and higher homologues in telomer based products and other fluoropolymers that are produced in non-US operations was reported by Asahi as being negligible as compared to the quantity of precursors in those same products.

^g % reduction in emissions for Daikin is reported for % reduction in ratios of (kg of release / kg of product produced).

^h All values refer to reductions in the concentration of the chemical(s) in the product except where noted that the reduction refers to the reduction in total mass of chemical(s) that is present in the total amount of product produced.

ⁱ The quantity of PFOA, PFOA salts and higher homologues in telomer based products and other fluoropolymers that are produced in non-US operations was reported by Asahi as being negligible as compared to the quantity of precursors in those same products.

^j The quantity of PFOA, PFOA salts and higher homologues in telomer based products and other fluoropolymers that are produced in non-US operations was reported by Asahi as being negligible as compared to the quantity of precursors in those same products.

^k % reduction in emissions for Daikin is reported for % reduction in ratios of (kg of release / kg of product produced).

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Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Second Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2007	PFOA and Higher Homologues	> 1,000 - 10,000	For FP Production: (> 0.1 - 1) kg / 100 kg	> 500 - 1,000	> 70 - 150	Not Applicable
		Precursors	Not Applicable				
Asahi	2007	PFOA, PFOA salts and Higher Homologues	5,027 ^a	For FP Production: < 1 kg / 100 kg	100-1,570	0.12	Not Applicable
		Precursors	Not Applicable				
Ciba	2007	PFOA	0 kg (total for emissions and product content)				
		Higher Homologues	0 kg (total for emissions and product content)				
		Precursors	0 kg (total for emissions and product content)				
Clariant	2007	PFOA and PFOA salts	None reported				
		Direct Precursors					
Daikin	2007	PFOA	<100	None reported	<10	<10	<5 kg
		Precursor and Higher Homologues	<100	None reported	Not Applicable	Not Applicable	CBI
DuPont	2007	PFOA and PFOA Salts	960 ^b	None reported	36	14	21 kg
		Higher Homologues	Not Reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	3 kg
Dyneon/3M	2007	PFOA, PFOA salts and Higher Homologues	0	0	Not Applicable	Not Applicable	Not Applicable
		Precursors	Not Applicable				
Solvay Solexis	2007	PFOA, PFOA salts and Higher Homologues	1,000 - 10,000	For FP Production: 0.161 kg / 100 kg	400-450	170-200	Not Applicable
		Precursors	Not Applicable				

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Second Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2007	PFOA and Higher Homologues	> 1,000 - 10,000	For FP Production: (> 0.1 - 1) kg / 100 kg	Not Applicable	> 70 - 150	Not Applicable
		Precursors	Not Applicable				
Asahi	2007	PFOA, PFOA salts and Higher Homologues	3,910	For FP Production: < 1 kg / 100 kg	5-2,900	18	Negligible compared to precursors
		Precursors	2,310	For Telomer Production: < 1 kg / 100 kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba	2007	PFOA	16 kg (total for emissions and product content)				
		Higher Homologues	14 kg (total for emissions and product content)				
		Precursors	545 kg (total for emissions and product content)				
Clariant	2007	PFOA and PFOA salts	1	For Telomer Production: 2.0 E-5 kg / 100 kg	None reported	None reported	2 kg
		Direct Precursors	<3	For Telomer Production: 6.0 E-5 kg / 100 kg	None reported	None reported	60 kg
Daikin	2007	PFOA	<2,500	None reported	<100	<120	<5 kg
		Precursor and Higher Homologues	<1,000	None reported	Not Applicable	Not Applicable	CBI
DuPont	2007	PFOA and PFOA salts	1,410 ^c	None reported	120	0	21 kg
		Higher homologues	None reported	None reported			None reported
		Precursors	None reported	None reported	None reported	None reported	3 kg
Dyneon/3M	2007	PFOA, PFOA salts and Higher Homologues	1,270	For FP Production: <1 kg / 100 kg	8	Not Applicable	Not Applicable
		Precursors	Not Applicable				
Solvay Solexis	2007	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

Reported Percent Reductions in Emissions and Product Content

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2007)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2007	PFOA and Higher Homologues	29%	0%	36%	Not Applicable
		Precursors	Not Applicable			
Asahi	2007	PFOA, PFOA salts and Higher Homologues	4% ^d	63%	PFOA content in this product is negligible as compared to that in dispersions	Not Applicable
		Precursors	Not Applicable			
Ciba	2007	PFOA	100% (total for emissions and product content)			
		Higher Homologues	100% (total for emissions and product content)			
		Precursors	100% (total for emissions and product content)			
Clariant	2007	PFOA and PFOA Salts	None reported			
		Direct Precursors				
Daikin	2007	PFOA	99%	99%	>30%	>60%
		Precursor and Higher Homologues	>95%	Not Applicable	Not Applicable	>70%
DuPont	2007	PFOA and PFOA Salts	98%	96%	96%	96%
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	96%
Dyneon/3M	2007	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	Not Applicable
		Precursors	Not Applicable			
Solvay Solexis	2007	PFOA, PFOA salts and Higher Homologues	14% ^e	59%	0%	Not Applicable
		Precursors	Not Applicable			

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2007)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2007	PFOA and Higher Homologues	CBI			
		Precursors	Not Applicable			
Asahi	2007	PFOA, PFOA salts and Higher Homologues	60%	43%	PFOA content in this product is negligible as compared to that in dispersions	Negligible as compared to precursors
		Precursors	42%	Not Applicable	Not Applicable	23%
Ciba	2007	PFOA	96.4% (total for emissions and product content)			
		Higher Homologues	96.4% (total for emissions and product content)			
		Precursors	Increase of 24.4% (total for emissions and product content)			
Clariant	2007	PFOA and PFOA Salts	90%	None reported	None reported	35%
		Direct Precursors	40%	None reported	None reported	38%
Daikin	2007	PFOA	>40%	>95%	>20%	>70%
		Precursor and Higher Homologues	>40%	Not Applicable	Not Applicable	>70%
DuPont	2007	PFOA and PFOA Salts	93%	88%	100%	96%
		Higher Homologues	None reported			
		Precursors	None reported	None reported	None reported	96%
Dyneon/3M	2007	PFOA, PFOA salts and Higher Homologues	91%	99%	Not Applicable	Not Applicable
		Precursors	Not Applicable			
Solvay Solexis	2007	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

^a Reflects increased production at company's U.S. facilities during the most recent reporting year, as compared to the previous year.

^b Number represents global emissions of telomer manufacturing.

^c Number represents global emissions of telomer manufacturing.

^d Reflects increased production at company's U.S. facilities during the most recent reporting year, as compared to the previous year.

^e Reflects increased production at company's U.S. facilities during the most recent reporting year, as compared to the previous year.

EPA's Summary Tables for 2010 Company Progress Reports

Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Fourth Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2009	PFOA and Higher Homologues	>1,000 – 10,000	>0.0001 – 0.001	0	>10 - 50	Not Applicable
		Precursors	Not Applicable				
Asahi	2009	PFOA, PFOA salts and Higher Homologues	0	Not Applicable	0	0	Not Applicable
		Precursors	Not Applicable				
Ciba	2009	PFOA	0 kg (total for emissions and product content)				
		Higher Homologues	0 kg (total for emissions and product content)				
		Precursors	0 kg (total for emissions and product content)				
Clariant	2009	PFOA and PFOA salts	Not Applicable				
		Direct Precursors					
Daikin	2009	PFOA	<100	Not reported	<5	<15	<5 kg
		Precursor and Higher Homologues	<50	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2009	PFOA and PFOA Salts	558	CBI	8	9	12 kg globally
		Higher Homologues	None Reported	None reported			None reported
		Precursors	CBI	CBI	None reported	None reported	<6 kg globally
Dyneon/3M	2009	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis, Inc	2009	PFOA, PFOA salts and Higher Homologues	>1,000- 10,000	0.00128	<10ppm	170-200	Not Applicable
		Precursors	Not Applicable				

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Fourth Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2009	PFOA and Higher Homologues	>1,000 – 10,000	For FP Production: (>0.1-1) kg/100kg	Not Applicable	>50 – 100	Not Applicable
		Precursors	Not Applicable				
Asahi	2009	PFOA, PFOA salts and Higher Homologues	1,363	For FP Production: <1kg/100kg	5-2,900	18	Negligible as compared to precursors
		Precursors	1,253	For Telomer Production: <1kg/100kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba	2009	PFOA	10.8 kg (total for emissions and product content)				
		Higher Homologues	22.7 kg (total for emissions and product content)				
		Precursors	1189.0 kg (total for emissions and product content)				
Clariant	2009	PFOA and PFOA salts	0.5	< 0.00000015	Not Applicable	Not Applicable	<1.25 kg
		Direct Precursors	<2	< 0.0000005	Not Applicable	Not Applicable	26 kg
Daikin	2009	PFOA	<1,350	Not reported	<100	<50	<5 kg
		Precursor and Higher Homologues	<300	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2009	PFOA and PFOA salts	572	CBI	59	0	12 kg globally
		Higher homologues	None reported	None reported			None reported
		Precursors	None reported	CBI	None reported	None reported	<6 kg globally
Dyneon/3M	2009	PFOA, PFOA salts and Higher Homologues	0	For FP Production: <1kg/100kg	0	3	No Telomer Production
		Precursors	0				
Solvay Solexis, Inc	2009	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

Reported Percent Reductions in Emissions and Product Content

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2008)

Company	Fourth Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2009	PFOA and Higher Homologues	75%	100%	80%	Not Applicable
		Precursors	Not Applicable			
Asahi	2009	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
Ciba	2009	PFOA	100% (total for emissions and product content)			
		Higher Homologues	100% (total for emissions and product content)			
		Precursors	100% (total for emissions and product content)			
Clariant	2009	PFOA and PFOA Salts	Not Applicable			
		Direct Precursors				
Daikin	2009	PFOA	>95%	>95%	>85%	>80%
		Precursor and Higher Homologues	>95%	Not Applicable	Not Applicable	>90%
DuPont	2009	PFOA and PFOA Salts	99%	99%	97%	98% globally
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	97% globally
Dyneon/3M	2009	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis, Inc	2009	PFOA, PFOA salts Ad Higher Homologues	39%	99%	0%	Not Applicable
		Precursors	Not Applicable			

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2008)

Company	Fourth Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2009	PFOA and Higher Homologues	CBI	Not Applicable	CBI	Not Applicable
		Precursors	Not Applicable			
Asahi	2009	PFOA, PFOA salts and Higher Homologues	86%	78%	PFOA content in this product is negligible as compared to that in dispersions	Negligible as compared to precursors
		Precursors	68%	Not Applicable	Not Applicable	60%
Ciba	2009	PFOA	97.6% (total for emissions and product content)			
		Higher Homologues	95.0% (total for emissions and product content)			
		Precursors	Increase of 2.7 times (total for emissions and product content)			
Clariant	2009	PFOA and PFOA Salts	>95%	Not Applicable	Not Applicable	>80%
		Direct Precursors	>80%	Not Applicable	Not Applicable	75%
Daikin	2009	PFOA	>85%	>95%	>85%	>80%
		Precursor and Higher Homologues	>80%	Not Applicable	Not Applicable	>80%
DuPont	2009	PFOA and PFOA Salts	97%	94%	100%	98% globally
		Higher Homologues	None reported			
		Precursors	None reported	None reported	None reported	97% globally
Dyneon/3M	2009	PFOA, PFOA salts and Higher Homologues	100%	100%	88%	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis, Inc	2009	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

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Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Fifth Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2010	PFOA and Higher Homologues	>1,000 – 10,000	>0.0001 – 0.001	0	>10 - 50	Not Applicable
		Precursors	Not Applicable				
Asahi	2010	PFOA, PFOA salts and Higher Homologues	0	Not Applicable	0	0	Not Applicable
		Precursors	Not Applicable				
BASF (Ciba)	2010	PFOA	0 kg (total for emissions and product content)				
		Higher Homologues	0 kg (total for emissions and product content)				
		Precursors	0 kg (total for emissions and product content)				
Clariant	2010	PFOA and PFOA salts	Not Applicable				
		Direct Precursors					
Daikin	2010	PFOA	<50	Not reported	<5	<5	<1 kg
		Precursor and Higher Homologues	<50	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2010	PFOA and PFOA Salts	309	None reported	8	4	11 kg globally
		Higher Homologues	None Reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	<3 kg globally
Dyneon/3M	2010	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis, Inc	2010	PFOA, PFOA salts and Higher Homologues	>100- 1000	0.000035	<10ppm	<5 ppm	Not Applicable
		Precursors	Not Applicable				

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Fifth Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2010	PFOA and Higher Homologues	>1,000 – 10,000	For FP Production: (>0.001-0.01) kg/100kg	Not Applicable	>50 – 100	Not Applicable
		Precursors	Not Applicable				
Asahi	2010	PFOA, PFOA salts and Higher Homologues	369	For FP Production: <1kg/100kg	10-100	18	Negligible as compared to precursors
		Precursors	1,122	For Telomer Production: <1kg/100kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
BASF (Ciba)	2010	PFOA	9.5 kg (total for emissions and product content)				
		Higher Homologues	8.2 kg (total for emissions and product content)				
		Precursors	832.8 kg (total for emissions and product content)				
Clariant	2010	PFOA and PFOA salts	0.5	< 0.00000015	Not Applicable	Not Applicable	1.75 kg
		Direct Precursors	<1.5	< 0.00000075	Not Applicable	Not Applicable	36 kg
Daikin	2010	PFOA	<1,000	Not reported	<100	<50	<5 kg
		Precursor and Higher Homologues	<300	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2010	PFOA and PFOA salts	755	None reported	8	0	11 kg globally
		Higher homologues	None reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	<3 kg globally
Dyneon/3M	2010	PFOA, PFOA salts and Higher Homologues	0	For FP Production: <1kg/100kg	0	3	No Telomer Production
		Precursors	0				
Solvay Solexis, Inc	2010	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

Reported Percent Reductions in Emissions and Product Content

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2008)

Company	Fifth Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2010	PFOA and Higher Homologues	75%	100%	80%	Not Applicable
		Precursors	Not Applicable			
Asahi	2010	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
BASF (Ciba)	2010	PFOA	100% (total for emissions and product content)			
		Higher Homologues	100% (total for emissions and product content)			
		Precursors	100% (total for emissions and product content)			
Clariant	2010	PFOA and PFOA Salts	Not Applicable			
		Direct Precursors				
Daikin	2010	PFOA	>95%	>95%	>85%	>90%
		Precursor and Higher Homologues	>95%	Not Applicable	Not Applicable	>95%
DuPont	2010	PFOA and PFOA Salts	99%	99%	99%	98% globally
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	97% globally
Dyneon/3M	2010	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis, Inc	2010	PFOA, PFOA salts Ad Higher Homologues	97.26%	99%	97%	Not Applicable
		Precursors	Not Applicable			

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2008)

Company	Fifth Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2010	PFOA and Higher Homologues	CBI	Not Applicable	CBI	Not Applicable
		Precursors	Not Applicable			
Asahi	2010	PFOA, PFOA salts and Higher Homologues	96%	98%	PFOA content in this product is negligible as compared to that in dispersions	Negligible as compared to precursors
		Precursors	72%	Not Applicable	Not Applicable	73%
BASF (Ciba)	2010	PFOA	97.9% (total for emissions and product content)			
		Higher Homologues	97.8% (total for emissions and product content)			
		Precursors	Increase of 1.9 times (total for emissions and product content)			
Clariant	2010	PFOA and PFOA Salts	90%	Not Applicable	Not Applicable	>70%
		Direct Precursors	>75%	Not Applicable	Not Applicable	71%
Daikin	2010	PFOA	>95%	>95%	>95%	>85%
		Precursor and Higher Homologues	>95%	Not Applicable	Not Applicable	>95%
DuPont	2010	PFOA and PFOA Salts	96%	99%	100%	98% globally
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	97% globally
Dyneon/3M	2010	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis, Inc	2010	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

EPA's Summary Tables for 2012 Company Progress Reports

<http://epa.gov/oppt/pfoa/pubs/preports.htm>

Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Reduction Year	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2011	PFOA and Higher Homologues	> 1,000 - 4,000	> 0.0001 – 0.0005	0	>5 - 20	Not Applicable
		Precursors	Not Applicable				
Asahi	2011	PFOA, PFOA salts and Higher Homologues	0	Not Applicable	0	0	Not Applicable
		Precursors	Not Applicable				
Ciba/BASF	2011	PFOA and Higher Homologues	0	0	Not Applicable	Not Applicable	0
		Precursors	0	0	Not Applicable	Not Applicable	0
Clariant	2011	PFOA and PFOA salts	Not Applicable				
		Direct Precursors					
Daikin	2011	PFOA	<25	Not reported	<2.5	<2.5	<0.5kg
		Precursor and Higher Homologues	<50	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2011	PFOA and PFOA Salts	261	None reported	6	3	14 kg ^a
		Higher Homologues	Not Reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	<3 kg ^a
Dyneon/3M	2011	PFOA, PFOA salts and Higher Homologues	0	0	0	0	Not Applicable
		Precursors	0				
Solvay Solexis	2011	PFOA, PFOA salts and Higher Homologues	0	0	<10	<5	Not Applicable
		Precursors	Not Applicable				

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Second Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2011	PFOA and Higher Homologues	> 1,000 - 4,000	> 0.001 - 0.005	Not Applicable	> 50 - 100	Not Applicable
		Precursors	Not Applicable				
Asahi	2011	PFOA, PFOA salts and Higher Homologues	237	For FP Production: < 1 kg / 100 kg	Not Applicable	0.08	Negligible compared to precursors
		Precursors	468	For Telomer Production: < 1 kg / 100 kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba/BASF	2011	PFOA and Higher Homologues	36.7	8.9E-05	Not Applicable	Not Applicable	4.1 ^b
		Precursors	0	0	Not Applicable	Not Applicable	544 ^b
Clariant	2011	PFOA and PFOA salts	2	For Telomer Production: <5.0 E-7	None reported	None reported	2.6 kg
		Direct Precursors	<2	For Telomer Production: <5.0 E-7	None reported	None reported	52 kg
Daikin	2011	PFOA	<500	Not reported	<100	<25	<2.5 kg
		Precursor and Higher Homologues	<200	Not reported	Not Applicable	Not Applicable	CBI
DuPont	2011	PFOA and PFOA salts	556	None reported	6	0	See Table 1 ^c
		Higher Homologues	None reported	None reported			None reported
		Precursors	None reported	None reported	None reported	None reported	See Table 1 ^c
Dyneon/3M	2011	PFOA, PFOA salts and Higher Homologues	0	0	0	0	Not Applicable
		Precursors	0				
Solvay Solexis	2011	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

Reported Percent Reductions in Emissions and Product Content

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2011)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2011	PFOA and Higher Homologues	89%	100%	96%	Not Applicable
		Precursors	Not Applicable			
Asahi	2011	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
Ciba/BASF	2011	PFOA and Higher Homologues	100	100	100	Not Applicable
		Precursors	100	100	100	Not Applicable
Clariant	2011	PFOA and PFOA Salts	Not Applicable			
		Direct Precursors				
Daikin	2011	PFOA	>97.5%	>97.5%	>90%	>95%
		Precursor and Higher Homologues	>97.5%	Not Applicable	Not Applicable	>95%
DuPont	2011	PFOA and PFOA Salts	99%	99.4%	99%	97% ^a
		Higher Homologues	None reported			None reported
		Direct Precursors	CBI	None reported	None reported	97% ^a
Dyneon/3M	2011	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	Not Applicable
		Precursors	Not Applicable			
Solvay Solexis	2011	PFOA, PFOA salts and Higher Homologues	100%	99%	99%	Not Applicable
		Precursors	Not Applicable			

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2011)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2011	PFOA and Higher Homologues	CBI	Not Applicable	CBI	Not Applicable
		Precursors	Not Applicable			
Asahi	2011	PFOA, PFOA salts and Higher Homologues	98%	100%	PFOA content in this product is negligible as compared to that in dispersions	Negligible as compared to precursors
		Precursors	88%	Not Applicable	Not Applicable	88%
Ciba/BASF	2011	PFOA and Higher Homologues	68%	NA	NA	>99%
		Precursors	NA	NA	NA	(54%) ^d
Clariant	2011	PFOA and PFOA Salts	60%	None Reported		57%
		Direct Precursors	>80%	None Reported		58%
Daikin	2011	PFOA	>97.5%	>97.5%	>97.5%	>90%
		Precursor and Higher Homologues	>95%	Not Applicable	Not Applicable	>95%
DuPont	2011	PFOA and PFOA Salts	97%	99.5%	100%	See Table 3 ^e
		Higher Homologues	None reported			
		Direct Precursors	None reported	None reported	None reported	See Table 3 ^e
Dyneon/3M	2011	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
Solvay Solexis	2011	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

^a Global number – regional data are CBI

^b Values reported on wet basis

^c Global number reported in table 1

^d In 2011 the ratio of products changed such that those products containing lower concentrations of precursors were produced at a proportionately lower rate. This caused the overall % of precursors in product content to actually increase, even though production of all products in total continued to decrease.

^e Global number reported in table 3

EPA's Summary Tables for 2013 Company Progress Reports

<http://epa.gov/oppt/pfoa/pubs/preports.htm>

Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Reduction Year	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2012	PFOA, PFOA salts and Higher Homologues	> 500 – 2,000	>0.0001-0.0005	0	>5-20	Not Applicable
		Precursors	Not Applicable				
Asahi	2012	PFOA, PFOA salts and Higher Homologues	0	Not Applicable	0	0	Not Applicable
		Precursors	Not Applicable				
Ciba/BASF	2012	PFOA	Not Applicable				
		Higher Homologues					
		Precursors					
Clariant	2012	PFOA and PFOA salts	Not Applicable				
		Direct Precursors					
Daikin	2012	PFOA	<0.1	None reported	0	0	0.13 kg
		Precursor and Higher Homologues	<0.1	None reported	Not Applicable	Not Applicable	CBI
DuPont	2012	PFOA and PFOA Salts	137	None reported	6	3	7 kg ¹
		Higher Homologues	Not Reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	<3 kg ²
Dyneon/3M	2012	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis	2012	PFOA, PFOA salts and Higher Homologues	0	0	<10	<5	Not Applicable
		Precursors	Not Applicable				

¹ Global number – regional data are CBI

² Global number – regional data are CBI

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Second Year Reductions	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2012	PFOA, PFOA salts and Higher Homologues	> 500 – 2,000	>0.0003-0.0008	Not Applicable	> 25-75	Not Applicable
		Precursors	Not Applicable				
Asahi	2012	PFOA, PFOA salts and Higher Homologues	23.5	For FP Production: < 1 kg / 100 kg	0	18	Negligible compared to precursors
		Precursors	0	Not Applicable	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba/BASF	2012	PFOA	Not Applicable				
		Higher Homologues					
		Precursors					
Clariant ³	2012	PFOA and PFOA salts	1.5	None reported	None reported	None reported	2 kg
		Direct Precursors	<1.5	None reported	None reported	None reported	25 kg
Daikin	2012	PFOA	Not reported				
		Precursor and Higher Homologues					
DuPont	2012	PFOA and PFOA salts	353	None reported	5	0	4
		Higher Homologues	None reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	5
Dyneon/3M	2012	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis	2012	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

³ The release and product content estimates are inconsistent with Clariant's CBI submission – see ERG's analysis.

⁴ Global number reported in table 1

⁵ Global number reported in table 1

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2012)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2012	PFOA, PFOA salts and Higher Homologues	92%	100%	96%	Not Applicable
		Precursors	Not Applicable			
Asahi	2012	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
Ciba/BASF	2012	PFOA	Not Applicable			
		Higher Homologues				
		Precursors				
Clariant	2012	PFOA and PFOA Salts	Not Applicable			
		Direct Precursors				
Daikin	2012	PFOA	>99%	100%	100%	97%
		Precursor and Higher Homologues	>99%	Not Applicable	Not Applicable	99%
DuPont	2012	PFOA and PFOA Salts	99%	99%	99%	99% ⁶
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	98% ⁷
Dyneon/3M	2012	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	Not Telomer Production
		Precursors	No Precursor Production.			
Solvay Solexis	2012	PFOA, PFOA salts and Higher Homologues	99%	99%	99%	Not Applicable
		Precursors	Not Applicable			

⁶ Global number – regional data are CBI

⁷ Global number – regional data are CBI

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2012)

Company	Second Year Reductions	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2012	PFOA, PFOA salts and Higher Homologues	CBI	Not Applicable	CBI	Not Applicable
		Precursors	Not Applicable			
Asahi	2012	PFOA, PFOA salts and Higher Homologues	99.8%	100%	99.8%	Negligible as compared to precursors.
		Precursors	100%	Not Applicable	Not Applicable	96%
Ciba/BASF	2012	PFOA	Not Applicable			
		Higher Homologues				
		Precursors				
Clariant	2012	PFOA and PFOA Salts	70%	Not Applicable	Not Applicable	80%
		Direct Precursors	>85%	Not Applicable	Not Applicable	80%
Daikin	2012	PFOA	Not reported			
		Precursor and Higher Homologues				
DuPont	2012	PFOA and PFOA Salts	98%	99%	100%	8
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	9
Dyneon/3M	2012	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis	2012	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

⁸ Global number – regional data are CBI

⁹ Global number – regional data are CBI

EPA's Non-CBI Summary Tables for 2014 Company Progress Reports

<http://epa.gov/oppt/pfoa/pubs/preports.htm>

Table 1. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations

Company	Reduction Year	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2013	PFOA, PFOA salts and Higher Homologues	>500 – 2,000	>0.0001-0.0005	0	>5-20	Not Applicable
		Precursors	Not Applicable				
Asahi	2013	PFOA, PFOA salts and Higher Homologues	0	Not Applicable	0	0	Not Applicable
		Precursors	Not Applicable				
Ciba/BASF	2013	PFOA	Not Applicable				
		Higher Homologues					
		Precursors					
Clariant	2013	PFOA and PFOA salts	Not Applicable				
		Direct Precursors					
Daikin	2013	PFOA	0	0	0	0	0
		Precursor and Higher Homologues	0	0	Not Applicable	Not Applicable	0
DuPont	2013	PFOA and PFOA Salts	90	None reported	2	2	9 kg ¹
		Higher Homologues	None Reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	<8 kg ¹
Dyneon/3M	2013	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis	2013	PFOA, PFOA salts and Higher Homologues	0	0	<2	<1 ppb	Not Applicable
		Precursors	Not Applicable				

¹ Global number – regional data are CBI

Table 2. Reported Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations

Company	Reduction Year	Chemical Category	Emissions		Product Content		
			Releases to all media from FP and Telomer Manufacturing (kg)	kg of release / kg of product produced	Dispersions (ppm wet-weight basis)	Other Fluoropolymers (ppm dry-weight basis)	Telomers (ppm dry-weight basis, unless stated otherwise)
Arkema	2013	PFOA, PFOA salts and Higher Homologues	>500 – 2,000	>0.0003-0.0008	Not Applicable	> 25-75	Not Applicable
		Precursors	Not Applicable				
Asahi	2013	PFOA, PFOA salts and Higher Homologues	20.1	For FP Production: <1 kg / 100 kg	Not Applicable	18	Negligible compared to precursors
		Precursors	0	For Telomer Production: <1 kg / 100 kg	Not Applicable	Not Applicable	Average 50% (range: 0-100%)
Ciba/BASF	2013	PFOA	Not Applicable				
		Higher Homologues					
		Precursors					
Clariant	2013	PFOA and PFOA salts	1.0	None reported	None reported	None reported	<1 kg
		Direct Precursors	<1.5	None reported	None reported	None reported	<7 kg
Daikin	2013	PFOA	Not reported				
		Precursor and Higher Homologues					
DuPont	2013	PFOA and PFOA salts	45	None reported	1	0	See note ²
		Higher Homologues	None reported	None reported			None reported
		Precursors	CBI	None reported	None reported	None reported	See note ²
Dyneon/3M	2013	PFOA, PFOA salts and Higher Homologues	0	0	0	0	No Telomer Production
		Precursors	0				
Solvay Solexis	2013	PFOA, PFOA salts and Higher Homologues	Not Applicable				
		Precursors	Not Applicable				

² Global number reported in table 1

Table 3. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from U.S. Operations (cumulative percent reductions from baseline year through end of 2013)

Company	Reduction Year	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2013	PFOA, PFOA salts and Higher Homologues	91%	100%	96%	Not Applicable
		Precursors	Not Applicable			
Asahi	2013	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	Not Applicable
		Precursors	Not Applicable			
Ciba/BASF	2012	PFOA	Not Applicable			
		Higher Homologues				
		Precursors				
Clariant	2013	PFOA and PFOA Salts	Not Applicable			
		Direct Precursors				
Daikin	2013	PFOA	100%	100%	100%	100%
		Precursor and Higher Homologues	100%	Not Applicable	Not Applicable	100%
DuPont	2013	PFOA and PFOA Salts	99.8%	99.9%	99%	99% ³
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	98% ³
Dyneon/3M	2013	PFOA, PFOA salts and Higher Homologues	100%	100%	Not Applicable	Not Telomer Production
		Precursors	No Precursor Production.			
Solvay Solexis	2013	PFOA, PFOA salts and Higher Homologues	>99.999%	>99.999%	>99.999%	Not Applicable
		Precursors	Not Applicable			

³ Global number – regional data are CBI

Table 4. Reported Percent Reductions in Emissions and Product Content of PFOA, Precursors, and Higher Homologues from Non-U.S. Operations (cumulative percent reductions from baseline year through end of 2013)

Company	Reduction Year	Chemical Category	% Reduction in Emissions	% Reduction in Product Content		
			% Reductions in total quantity of chemical(s) released from baseline year	Fluoropolymer Dispersions	Other Fluoropolymers	Telomer based products
Arkema	2013	PFOA, PFOA salts and Higher Homologues	CBI	Not Applicable	CBI	Not Applicable
		Precursors	Not Applicable			
Asahi	2013	PFOA, PFOA salts and Higher Homologues	99.8%	100%	99.9%	Negligible as compared to precursors.
		Precursors	100%	Not Applicable	Not Applicable	100%
Ciba/BASF	2012	PFOA	Not Applicable			
		Higher Homologues				
		Precursors				
Clariant	2013	PFOA and PFOA Salts	>80%	None Reported	None Reported	90%
		Direct Precursors	>85%	None Reported	None Reported	94%
Daikin	2013	PFOA	Not reported			
		Precursor and Higher Homologues				
DuPont	2013	PFOA and PFOA Salts	99.8%	99.9%	100%	See note ⁴
		Higher Homologues	None reported			
		Precursors	CBI	None reported	None reported	See note ⁴
Dyneon/3M	2013	PFOA, PFOA salts and Higher Homologues	100%	100%	100%	No Telomer Production
		Precursors	No Precursor Production			
Solvay Solexis	2013	PFOA, PFOA salts and Higher Homologues	Not Applicable			
		Precursors	Not Applicable			

⁴ Global number reported in table 3