

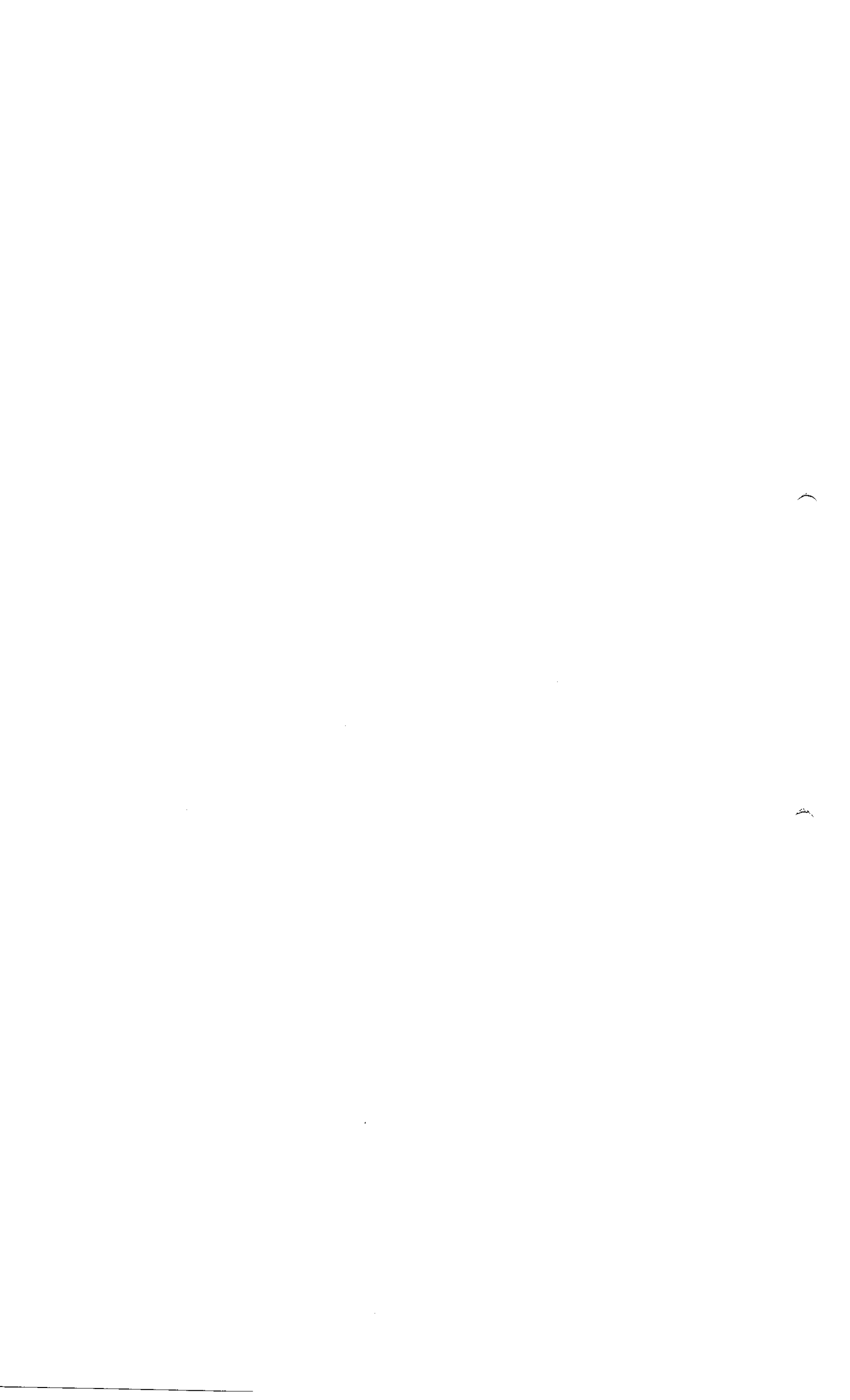
Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Pertussis immunogenicity anti-FHA	Anti-Filamentous Hemagglutinin (FHA) antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Pertussis immunogenicity anti-PT	Anti-Pertussis Toxoid (PTx) and antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Haemophilus immunogenicity	Not less than 50% of the vaccinated mice are seroconverted. Their titer is not less than 4 times that of the pooled control serum	Conforms	NP	Conforms at 7 months	NP	Conforms	Conforms at 19 months	Conforms	Not Performed†	Conforms
Non-adsorbed PT	For information ( $\mu\text{g/mL}$ )§	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Non-adsorbed FHA	For information ( $\mu\text{g/mL}$ )§	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Percent adsorption - tetanus toxoid	For information (%)	31	NP	36	NP	30	41	33	34	34
Percent adsorption - diphtheria toxoid	For information (%)	44	NP	42	NP	44	52	46	48	52
Potency on chicken	Type 1 $\geq 2$ Type 2 $\geq 2$ Type 3 $\geq 2$	3.51 4.05 3.77	NP NP NP	3.32 3.35 3.28	NP NP NP	2.68 2.54 3.14	3.35 3.14 3.25	3.28 3.25 3.39	2.98 2.83 3.17	2.96 2.54 3.48

ROXANA MONTEMILONE DIRECTORA TÉCNICA SANOFI PASTEUR S.A.  
CHRISTIAN DOMINGUEZ APODERADO SANOFI PASTEUR S.A.





Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
D-antigen content	Type 1: 20 - 43 DU/dose	27.6	NP	27.5	NP	28.0	26.9	27.5	28.7	26.3
	Type 2: 5 - 9 DU/dose	6.0	NP	6.0	NP	5.5	5.8	5.6	5.7	5.9
	Type 3: 17 - 36 DU/dose	22.6	NP	23.4	NP	22.5	24.2	24.2	22.5	22.6
Percent adsorption - hepatitis B (ELISA)	For information (%)	81	59	55	67	41	35	55	44	47
Hepatitis B in-vitro relative potency (IVRP)	For information (relative potency)	1.07	1.38	1.14	1.33	0.93	1.16	1.61	1.05	1.01
Hepatitis B immunogenicity	Upper confidence limit (P = 0.95) of the estimated relative potency is not less than 1.0	0.71	NP	NP	NP	1.16	NP	1.63	NP	0.81
		0.37	NP	NP	NP	0.68	NP	0.93	NP	0.45
Lower limit		1.38	NP	NP	NP	2.24	NP	3.30	NP	1.39
Upper limit		Conforms	NP	NP	NP	NP	NP	NP	NP	Conforms
Bacterial and fungal sterility test	No microbial growth		NP	NP	NP	NP	NP	NP	NP	Conforms
Pyrogen test	Conforms to Ph. Eur. criterion	0.35 (0.20 - 0.10 - 0.05)	NP	NP	NP	NP	NP	NP	NP	0.13 (0.00 - 0.08 - 0.05)

\* All the results are release results of the Final Bulk Product excepted for the following tests: appearance, extractable volume, D-antigen content, bacterial and fungal sterility test and pyrogen test. For these tests, the results are obtained from the T0 of the Filled Product.

† Not Performed due to industrial constraints

‡ Not Planned as per protocol

§ Expected value:  $\leq 2.5 \mu\text{g/mL}$

ROXANA MONTEMLONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 17 of 111





Table 5: Stability Study Results for Marcy l'Etoile Filled Product Batch S4106 at +5°C ± 3°C

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Appearance	Whitish and cloudy suspension	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms	Conforms
pH measurement	6.5 - 8.0	7.03	7.24	7.24	7.23	7.26	7.41	7.13	7.20	7.20
Free formaldehyde content	≤ 30 µg/mL	Not Performed†	Not Performed†	10.41	10.32	10.76	10.74	10.38	11.08	12.02
Extractable volume	At least the nominal volume	Conforms	NP†	NP	NP	NP	NP	NP	NP	Conforms
Osmolality measurement	250 - 450 mosmol/kg	Not Performed†	Not Performed†	331	333	334	332	327	336	335
Non-adsorbed PRP	≥ 16 µg/mL	19.6	21.2	22.2	22.6	24.4	24.5	23.4	25.8	25.5
Depolymerized PRP	For information (%)	7.7	16.6	18.6	21.4	28.9	30	38.4	38.9	42.5
Diphtheria potency : Activity Lower limit Upper limit	Activity ≥ 30 IU/mL	77	NP	79	NP	84	73	79	52	48
	Lower confidence limit (P = 0.95) of the estimated potency ≥ 20 IU/mL	47	NP	50	NP	57	49	55	36	29
	Upper limit	138	NP	147	NP	120	119	125	75	80
Tetanus potency : Activity Lower limit Upper limit	Lower confidence limit (P = 0.95) of the estimated potency ≥ 40 IU/mL	516	NP	880	NP	883	939	538	Not Performed†	1130
	Lower limit	294	NP	564	NP	621	729	411	Not Performed†	807
	Upper limit	796	NP	1238	NP	1463	1239	782	Not Performed†	1518





Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Histamine-sensitizing activity	≥ 95% survival (%)	98	NP	NP	NP	95	NP	100	NP	100
Pertussis immunogenicity anti-FHA	Anti-Filamentous Hemagglutinin (FHA) antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Pertussis immunogenicity anti-PT	Anti-Pertussis Toxoid (PTxd) and antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Haemophilus immunogenicity	Not less than 50% of the vaccinated mice are seroconverted. Their titer is not less than 4 times that of the pooled control serum	Conforms	NP	Conforms at 7 months	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Non-adsorbed PT	For information (µg/mL)§	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Non-adsorbed FHA	For information (µg/mL)§	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Percent adsorption – tetanus toxoid	For information (%)	24	NP	25	NP	30	40	41	31	37
Percent adsorption – diphtheria toxoid	For information (%)	35	NP	33	NP	31	39	30	38	45

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 19 of 111



Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Polioyelitis potency on chicken	Type 1 $\geq 2$	3.00	NP	2.91	NP	2.65	<2	2.79	2.69	2.31
	Type 2 $\geq 2$	3.21	NP	3.39	NP	2.74	<2	2.33	3.07	2.30
	Type 3 $\geq 2$	3.01	NP	3.80	NP	2.86	<2	2.77	2.91	2.38
							average of retests :			
							2.97			
							2.94			
							3.08			
D-antigen content	Type 1: 20 - 43 DU/dose	28.2	NP	26.4	NP	26.8	26.5	27.5	30.1	25.1
	Type 2: 5 - 9 DU/dose	5.5	NP	6.1	NP	5.7	5.9	6.0	6.0	5.7
	Type 3: 17 - 36 DU/dose	20.0	NP	22.5	NP	21.7	21.7	22.1	23.8	20.1
Percent adsorption - hepatitis B (ELISA)	For information (%)	85	73	72	68	58	56	63	57	60
Hepatitis B in-vitro relative potency (IVRP)	For information (relative potency)	0.87	1.26	1.54	0.78	0.96	0.94	1.05	1.09	1.06
Hepatitis B immunogenicity	Upper confidence limit (P = 0.95) of the estimated relative potency is not less than 1.0	1.09	NP	NP	NP	1.96	NP	1.12	NP	1.36
Lower limit		0.69	NP	NP	NP	1.11	NP	0.61	NP	0.76
Upper limit		1.72	NP	NP	NP	3.76	NP	2.26	NP	2.61
Bacterial and fungal sterility test	No microbial growth	Conforms	NP	NP	NP	NP	NP	NP	NP	Conforms

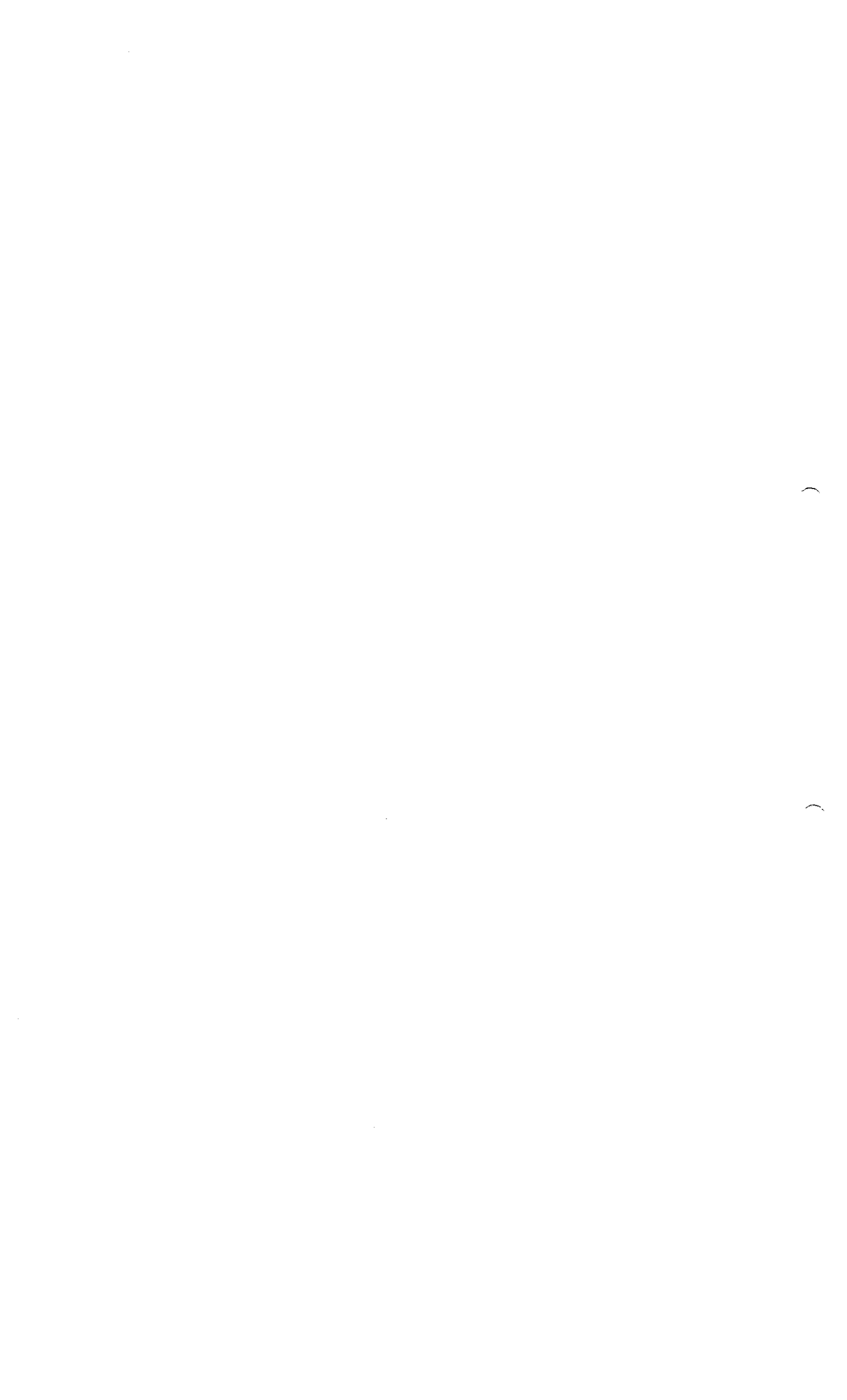
ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 20 of 111





Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Pyrogen test	Conforms to Ph. Eur. criterion	1.10 (0.00 - 1.00 - 0.10)	NP	NP	NP	NP	NP	NP	NP	0.28 (0.09 - 0.20 - 0.00)

\* All the results are release results of the Final Bulk Product excepted for the following tests: appearance, extractable volume, D-antigen content, bacterial and fungal sterility test and pyrogen test. For these tests, the results are obtained from the T0 of the Filled Product.

† Not Performed due to industrial constraints

‡ Not Planned as per protocol

§ Expected value:  $\leq 2.5$  µg/mL

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 21 of 111





Table 6: Stability Study Results for Marcy l'Etoile Filled Product Batch S4107 at +5°C ± 3°C

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Appearance	Whitish and cloudy suspension	Conforms	Conforms	Conforms	Conforms	Whitish and cloudy suspension, presence of 1 white particule in 1 syringe†	Conforms	Conforms	Conforms	Conforms
pH measurement	6.5 - 8.0	7.01	7.27	7.18	7.21	7.14	7.29	7.19	7.22	7.19
Free formaldehyde content	≤ 30 µg/mL	Not Performed‡	Not Performed‡	10.66	11.26	11.00	11.58	11.38	11.60	12.16
Extractable volume	At least the nominal volume	Conforms	NP§	NP	NP	NP	NP	NP	NP	Conforms
Osmolality measurement	250 - 450 mosmol/kg	Not Performed‡	Not Performed‡	333	336	337	336	337	338	334
Non-adsorbed PRP	≥ 16 µg/mL	20.6	22.4	23.1	22.9	25.0	25.1	24.5	25.8	26.2
Depolymerized PRP	For information (%)	8.0	15.6 at 4 months	17.9 at 7 months	20.1	25.9 at 15 months	29.0	38.6	39.7	41.8
Diphtheria potency: Activity Lower limit Upper limit	Activity ≥ 30 IU/mL Lower confidence limit (P = 0.95) of the estimated potency ≥ 20 IU/mL	53 39 79	NP NP NP	49 36 67 at 7 months	NP NP NP	92 55 177 at 13 months	49 28 90 at 19 months	54 33 88	42 27 62	45 23 86

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUE  
APODERADO  
SANOFI PASTEUR S.A.





Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

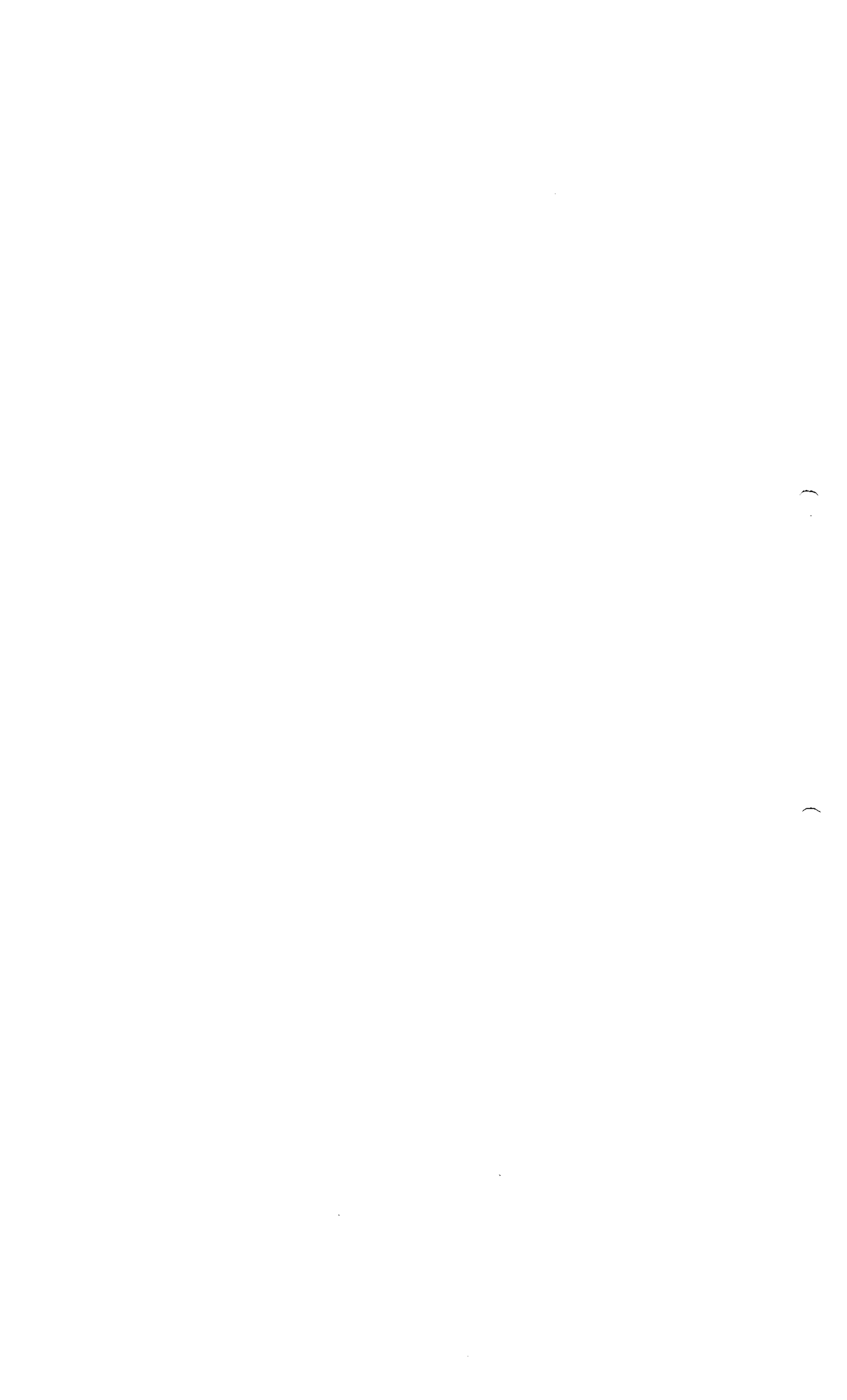
Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Tetanus potency: Activity Lower limit Upper limit	Lower confidence limit ( $P = 0.95$ ) of the estimated potency $\geq 40$ IU/mL	449 312 658	NP NP NP	509 276 806 at 7 months	NP NP NP	422 296 609	1652 1133 2462	1050 707 1713	Not Performed† Not Performed† Not Performed†	526 356 814
Histamine-sensitizing activity	$\geq 95\%$ survival (%)	100	NP	NP	NP	98	NP	98	NP	100
Pertussis immunogenicity anti-FHA	Anti-Filamentous Hemagglutinin (FHA) antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Pertussis immunogenicity anti-PT	Anti-Pertussis Toxoid (PTxd) and antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	Conforms	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms
Haemophilus immunogenicity	Not less than 50% of the vaccinated mice are seroconverted. Their titer is not less than 4 times that of the pooled control serum	Conforms	NP	Conforms at 7 months	NP	Conforms	Conforms	Conforms	Not Performed†	Conforms

ROXANA MONTEMILONE CHRISTIAN DOMINGUEZ  
DIRECTORA TÉCNICA APODERADO  
SANOFI PASTEUR S.A. SANOFI PASTEUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 23 of 111

6403



Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Non-adsorbed PT	For information (µg/mL)**	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Non-adsorbed FHA	For information (µg/mL)**	NP	NP	NP	NP	NP	NP	NP	NP	<2.5
Percent adsorption - tetanus toxoid	For information (%)	25	NP	35	NP	26	37	31	38	41
Percent adsorption - diphtheria toxoid	For information (%)	39	NP	37	NP	41	43	43	43	46
Polio myelitis potency on chicken	Type 1 ≥ 2	2.84	NP	2.79	NP	2.58	<2	2.65	3.00	2.72
	Type 2 ≥ 2	2.40	NP	2.96	NP	3.05	<2	2.56	2.77	2.27
	Type 3 ≥ 2	2.55	NP	3.77	NP	2.83	<2	3.05	2.58	2.23
D-antigen content	Type 1: 20 - 43 DU/dose	27.2	NP	25.5	NP	26.3	27.5	24.8	25.7	26.3
	Type 2: 5 - 9 DU/dose	6.0	NP	6.1	NP	5.7	6.0	5.8	6.2	5.9
	Type 3: 17 - 36 DU/dose	21.7	NP	22.1	NP	20.9	21.7	23.0	21.0	22.1
Percent adsorption - hepatitis B (ELISA)	For information (%)	81	57	61	63	49	45	56	44	54
	For information (relative potency)	0.84	1.13	1.39	0.88	1.01	0.91	0.98	1.14	0.94
	Upper confidence limit (P = 0.95) of the estimated relative potency is not less than 1.0	1.10	NP	NP	NP	1.01	NP	1.30	NP	0.74
Lower limit		0.69	NP	NP	NP	0.53	NP	0.63	NP	0.42
	Upper limit	1.73	NP	NP	NP	1.76	NP	3.48	NP	1.27
Bacterial and fungal sterility test	No microbial growth	Conforms	NP	NP	NP	NP	NP	NP	NP	Conforms

ROXANA MONTEMILONE DIRECTORA TÉCNICA SANOFI PASTEUR S.A.  
CHRISTIAN DOMINGUEZ APODERADO SANOFI PASTEUR S.A.





Section 3.2.P.8.3  
Stability Data

sano fi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Pyrogen test	Conforms to Ph. Eur. criterion	0.17 (0.16 - 0.02 - 0.00)	NP	NP	NP	NP	NP	NP	NP	0.49 (0.17 - 0.32 - 0.00)

\* All the results are release results of the Final Bulk Product excepted for the following tests: appearance, extractable volume, D-antigen content, bacterial and fungal sterility test and pyrogen test. For these tests, the results are obtained from the T0 of the Filled Product.

† Particle composition : zinc phosphate (40 µm)/silicea (20 µm)/tungsten (10 µm)

‡ Not Performed due to industrial constraints

§ Not Planned as per protocol

\*\* Expected value: ≤ 2.5 µg/mL

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANO FI PASTERUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANO FI PASTERUR S.A.

RA\_0301822

Confidential/Proprietary Information  
Page 25 of 111







**1.3 Study 3: Marcy l'Etoile Filled Product – Optimized Formulation – Stability Data on Long-Term Storage Conditions at +5°C ± 3°C**

18 months stability data with the optimized formulation on 3 batches of MLE FP are presented in Table 7 to Table 9.



Table 7: Stability Study Results for Marcy l'Etoile Filled Product Batch FDNC0491 at +5°C ± 3°C

Tests	Acceptance criteria	T0*	1 month	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Appearance	Whitish and cloudy suspension	Conforms	NP†	Conforms	Conforms	Conforms	Conforms	Conforms	On-going	On-going	On-going
pH measurement	6.5 - 7.5	7.27	NP	7.30	7.32	7.33	7.35	7.35	On-going	On-going	On-going
Free formaldehyde content	≤ 30 µg/mL	3.23	NP	NP	NP	NP	0.39	NP	On-going	NP	On-going
Extractable volume	At least the nominal volume	Conforms	NP	NP	NP	NP	NP	NP	NP	NP	On-going
Aluminium content	0.40 - 0.80 mg/dose	0.61	NP	NP	NP	NP	NP	NP	NP	NP	On-going
Osmolality measurement	300 - 400 mosmol/kg	338	NP	NP	NP	NP	NP	NP	NP	NP	On-going
Non-adsorbed PRP	≥ 16 µg/mL	25.4	21.8	26.5	23.9	23.3	23.0	23.9	On-going	On-going	On-going
Depolymerized PRP	For information (%)	17.9	19.7	21.2	24.2	30.4	30.9	35.6	On-going	On-going	On-going
Diphtheria potency : Activity	Activity ≥ 30 IU/mL	42	NP	NP	61	NP	64	61	On-going	On-going	On-going
Lower limit	Lower confidence limit (P = 0.95) of the estimated potency ≥ 20 IU/mL	34	NP	NP	43	NP	46	49	On-going	On-going	On-going
Upper limit		52	NP	NP	91	NP	97	78	On-going	On-going	On-going
Tetanus potency : Activity	Lower confidence limit (P = 0.95) of the estimated potency ≥ 40 IU/mL	556	NP	NP	763	NP	647	421	On-going	On-going	On-going
Lower limit		280	NP	NP	464	NP	467	300	On-going	On-going	On-going
Upper limit		853	NP	NP	1091	NP	1026	605	On-going	On-going	On-going
								at 20.5 months			





Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	1 month	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Histamine-sensitizing activity	≥ 95% survival (%)	100	NP	NP	NP	NP	100	NP	On-going	NP	On-going
Pertussis immunogenicity anti-FHA	Anti-Filamentous Hemagglutinin (FHA) antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	NP	Conforms	NP	Conforms	In-progress†	On-going	On-going	On-going
Pertussis immunogenicity anti-PT	Anti-Pertussis Toxoid (PTx)d and antibody titer obtained for the vaccine is not significantly ( $P = 0.95$ ) less than that of the reference vaccine	Conforms	NP	NP	Conforms	NP	Conforms	In-progress†	On-going	On-going	On-going
Haemophilus immunogenicity	For information§	Conforms	NP	NP	Conforms	NP	Conforms	Conforms	On-going	On-going	On-going
Non-adsorbed PT	For information (µg/mL)**	< 2.5	NP	NP	< 2.5 at 9 months	NP	< 2.5	NP	On-going	NP	On-going
Non-adsorbed FHA	For information (µg/mL)**	< 2.5	NP	NP	< 2.5 at 8 months	NP	< 2.5	NP	On-going	NP	On-going
Percent adsorption – tetanus toxoid	For information (%)	31	NP	34	37	NP	51	41	On-going	On-going	On-going
Percent adsorption – diphtheria toxoid	For information (%)	53	NP	59	62	NP	63	65	On-going	On-going	On-going
Rat immunogenicity assay for IPV	For information (relative potency)										
Type 1		0.7	NP	NP	NP	NP	0.8	NP	On-going	NP	On-going
Type 2		0.6	NP	NP	NP	NP	1.0	NP	On-going	NP	On-going
Type 3		1.9	NP	NP	NP	NP	0.8	NP	On-going	NP	On-going



ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A



Section 3.2.P.8.3  
Stability Data

sano fi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	1 month	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
D-antigen content	Type 1: 20 - 43 DU/dose	Not Performed††	NP	27.9	26.5	NP	26.9	27.3	On-going	On-going	On-going
	Type 2: 5 - 9 DU/dose		NP	6.4	6.2	NP	6.8	6.7	On-going	On-going	On-going
	Type 3: 17 - 36 DU/dose		NP	25.8	23.5	NP	23.6	25.3	On-going	On-going	On-going
Non adsorbed D Antigen Content	For information										
Type 1		26.9	NP	28.4	27.1	NP	27.1	27.4	On-going	On-going	On-going
Type 2		5.5	NP	5.9	5.2	NP	5.2	5.2	On-going	On-going	On-going
Type 3		26.3	NP	25.9	24.1	NP	23.8	24.4	On-going	On-going	On-going
Percent adsorption -- hepatitis B (ELISA)	For information (%)	89	84	87	88	88	85	86	On-going	On-going	On-going
Hepatitis B <i>in-vitro</i> relative potency (IVRP)	For information (relative potency)	1.43	NP	1.32	1.33	1.39	1.43	1.33	On-going	On-going	On-going
Hepatitis B Immunogenicity	Upper confidence limit (P = 0.95) of the estimated relative potency is not less than 1.0	1.21	NP	NP	2.11	NP	1.76	1.66	On-going	On-going	On-going
Lower limit		0.628	NP	NP	1.108	NP	0.887	1.038	On-going	On-going	On-going
Upper limit		2.561	NP	NP	4.354	NP	4.393	2.854	On-going	On-going	On-going
Bacterial and fungal sterility test	No microbial growth	Conforms	NP	NP	NP	NP	NP	NP	NP	NP	On-going
Pyrogen test	Conforms to Ph.. Eur. criterion	0.05 (0.00 - 0.00 - 0.05)	NP	NP	NP	NP	NP	NP	NP	NP	On-going
Specific toxicity for diphtheria and tetanus components	There must be no toxic reactions or deaths. All animals must maintain a healthy appearance during the period of observation and weigh no less at the end of the test than at the time of injection	Conforms	NP	NP	NP	NP	NP	NP	NP	NP	On-going

RA\_0301822

Confidential/Proprietary Information  
Page 29 of 111



ROXANA MONTEMILONE DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.  
CHRISTIAN DOMINGUEZ APODERADO  
SANOFI PASTEUR S.A.



Section 3.2.P.8.3  
Stability Data

sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	1 month	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Integrity test	The CCIT## is acceptable if no presence of dye is detected in the contents of any of the tested syringes	Conforms	NP	NP	NP	NP	Conforms	NP	On-going	NP	On-going

\* All the results are obtained from the T0 of the Filled Product excepted for the following tests: free formaldehyde content, osmolality measurement, diphtheria and tetanus potency, histamine-sensitizing activity, pertussis immunogenicity anti-FHA and anti-PT, haemophilus immunogenicity, non-adsorbed PT and FHA, rat immunogenicity assay for IPV, non-adsorbed D-antigen content, hepatitis B immunogenicity and specific toxicity for diphtheria and tetanus components. For these tests, the results are release results of the Final Bulk Product.

† Not Planned as per protocol

‡ The reference vaccine for pertussis immunogenicity test was changed at T18 months. The qualification of this reference standard was performed by a statistical comparison to the previous one

§ Expected results: Not less than 50% of the vaccinated mice are seroconverted. Their titer is not less than 4 times that of the pooled control serum

\*\* Expected value:  $\leq 2.5 \mu\text{g/mL}$

†† Not Performed due to industrial constraints

## CCIT: Container Closure Integrity Test

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.





sanofi pasteur  
352 - Hexaxim

Tests	Acceptance criteria	T0*	1 month	3 months	6 months	9 months	12 months	18 months	24 months	30 months	36 months
Integrity test	The CCIT## is acceptable if no presence of dye is detected in the contents of any of the tested syringes	Conforms	NP	NP	NP	NP	Conforms	NP	On-going	NP	On-going

\* All the results are obtained from the T0 of the Filled Product excepted for the following tests: free formaldehyde content, osmolality measurement, diphtheria and tetanus potency, histamine-sensitizing activity, pertussis immunogenicity anti-FHA and anti-PT, haemophilus immunogenicity, non-adsorbed PT and FHA, rat immunogenicity assay for IPV, non-adsorbed D-antigen content, hepatitis B immunogenicity and specific toxicity for diphtheria and tetanus components. For these tests, the results are release results of the Final Bulk Product.

† Not Planned as per protocol

‡ The reference vaccine for pertussis immunogenicity test was changed at T18 months. The qualification of this reference standard was performed by a statistical comparison to the previous one

§ Expected results: Not less than 50% of the vaccinated mice are seroconverted. Their titer is not less than 4 times that of the pooled control serum

\*\* Expected value:  $\leq 2.5 \mu\text{g/mL}$

†† Not Performed due to industrial constraints

## CCIT: Container Closure Integrity Test

ROXANA MONTEMILONE  
DIRECTORA TÉCNICA  
SANOFI PASTEUR S.A.

CHRISTIAN DOMINGUEZ  
APODERADO  
SANOFI PASTEUR S.A.

RA\_0301822



