



Test certificate N° 230

Bactericidal efficiency test according

to the norm NF EN 1276 (October 1997)

Address : _____

Address : HYPRED SA

Customer identity _____

Name : HYPRED SA
Address : 55 Bd Jules Verger

35 803 DINARD

Tel : 02-99-16-50-00 Fax : 02-99-16-50-20 E-mail : pmourcel@hypred.fr

Contact : _____

Surname : MOURCEL First name Philippe

Tel: 02-99-16-50-31 Fax : 02-99-16-52-75 E-mail: pmourcel@hypred.fr

Product : _____

Codification : 182 DEPTIL PA 5
Batch number : 4/9/22/2 - 45P98



Test certificate N° 230

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 15/05/03

Print date : 14/03/08

2/4

Sample identification

Name of the product : 182 DEPTIL PA 5

Batch : 4/9/22/2 - 45P98

Appearance : clear colourless liquid

Receipt date : 09/07/02

Date of manufacture : 9/04/02

Active principle:

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 101 NF EN 1276

Test method : Dilution / neutralization

Strain(s)	Neutralizing agent
Enterococcus hirae-Col:CIP 58.55	G neutralizer
Escherichia coli-Col:CIP 54.127	G neutralizer
Pseudomonas aeruginosa-Col:CIP 103467	G neutralizer
Staphylococcus aureus-Col:CIP 4.83	Neutralizing agent B

Appearance :

G neutralizer : (2 %) Sodium thiosulphate (g)

Neutralizing agent B : (3 %) Polysorbate 80 (ml); (3 %) Saponine (g); (0,3 %) Lecithin (g); (0,1 %) L-Histidin (g); (0,5 %) Sodium thiosulphate (g)

Experimental conditions :

Test manager : A-F. GABILLET

Start of analysis : 16/07/02

End of analysis : 01/08/02

Tested concentrations of the product : 0,01 in % (V/V)
0,05
0,1
0,2
0,5

Interfering substance : 134 Bovine albumin 0,3 g/l

Contact time : 5 (in mn)

Test temperature : 20 (in °C)

Incubation temperature : 37 (in °C)

Diluent described in the norm : Distilled water

Stability of the mixture of interfering substance and diluted product : No precipitate



Test certificate N° 230

First print date : 15/05/03

Print date : 14/03/08

Results

3/4

Tested strain(s)	Validation test				Bactericidal or Fungicidal tested suspension	Operating method at the concentration %				
	Bactericidal or Fungicidal suspension	Experimental conditions	Non toxicity of the neutraliser or reference filtration	Inactivation by dilution/neutralisation or filtration		0,01	0,05	0,1	0,2	0,5
137 Enterococcus hirae-Col:CIP 58.55	Vc : 167;183 Nv: 1750	Vc : 200;196 A: 198	Vc : 216;206 B: 211	Vc : 216;187 C: 202	10 ⁻⁶ 10 ⁻⁷ Vc : >300;>300 51;46 N: 485 000 000 N10 ⁷ 48,5 N10 ⁸ 4,9	Vc : >300;>300 Na: >3000 10 ⁴ R<10E4 10 ⁵ R<10E5	203;207 2050 2,4 0,2	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5
133 Escherichia coli-Col:CIP 54.127	Vc : 134;133 Nv: 1335	Vc : 123;112 A: 118	Vc : 124;131 B: 128	Vc : 119;148 C: 134	10 ⁻⁶ 10 ⁻⁷ Vc : 210;236 27;27 N: 227 272 727 N10 ⁷ 22,7 N10 ⁸ 2,3	Vc : 20;39 Na: 295 10 ⁴ 7,7 10 ⁵ 0,8	1;4 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5
132 Pseudomonas aeruginosa-Col:CIP 103467	Vc : 131;111 Nv: 1210	Vc : 219;198 A: 209	Vc : 197;186 B: 192	Vc : 279;298 C: 289	10 ⁻⁶ 10 ⁻⁷ Vc : 216;254 30;35 N: 243 181 818 N10 ⁷ 24,3 N10 ⁸ 2,4	Vc : >300;>300 Na: >3000 10 ⁴ R<10E4 10 ⁵ R<10E5	20;23 215 11,3 1,1	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5
136 Staphylococcus aureus-Col:CIP 4.83	Vc : 117;135 Nv: 1260	Vc : 170;195 A: 183	Vc : 129;129 B: 129	Vc : 153;151 C: 152	10 ⁻⁶ 10 ⁻⁷ Vc : 269;250 27;30 N: 261 818 182 N10 ⁷ 26,2 N10 ⁸ 2,6	Vc : >300;>300 Na: >3000 10 ⁴ R<10E4 10 ⁵ R<10E5	1;1 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5

Vc : Number of colonies on Petri dishes
N : CFU in the microbial tested suspension
Nv : CFU in the validation suspension
Na : CFU in assay mix

R : Viable cell reduction
A : CFU in experimental conditions
B : CFU in neutralizer non toxicity or filtration validation
C : CFU in dilution/neutralization or filtration validation



Test certificate N° 230

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 15/05/03

Print date : 14/03/08



Conclusion :

4/4

In conformity with the norm NF EN 1276 (October 1997), 4/9/22/2 - 45P98 batch of DEPTIL PA 5 product of HYPRED SA firm, when diluted at 0,1 % (V/V) in presence of Bovine albumin 0,3 g/l, presents a bactericidal activity for 5 minutes contact time, at 20 °C, towards the strain(s) : Enterococcus hirae, Escherichia coli, Pseudomonas aeruginosa, Staphylococcus aureus.

Strains are preserved and checked according to EN 12353.

Comments :

Written by:	Approved by:
A-F. GABILLET	M. THERAUD
on : 14/03/08	on : 14/03/08
Signature : 	Signature : 



Test certificate N° 1554 -1

Bactericidal efficiency test

according to the norm NF EN 13697 (November 2001)

Address :

Address : HYPRED SA

Customer identity

Name : HYPRED SA

Address : 55 bd Jules Verger

35 803

DINARD Cedex

Tel : 02-99-16-50-00

Fax : 02-99-16-50-20

E-mail : croullier@roullier.com

Contact :

Surname : ROULLIER

First name Cécile

Tel: 02-99-16-50-37

Fax : 02-99-16-52-75

E-mail: croullier@roullier.com

Product :

Codification : 942 DEPTIL PA 5

Batch number : 01/08/01/9F

Accréditation :

Accreditation
N° 1-1308



Accreditation of COFRAC laboratory section proves competence of laboratories only for test covered by accreditation. If particular notifications have been made in the method of indicated, these modifications or specifications are listed in the part "Comment" at the end of the test certificate.

This test certificate concerns only the tested product.

Duplication of this test certificate is only authorised in it's entirety

This test certificate is composed of 7 pages (this page included)



Test certificate N° 1554-1

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

First print date :20/02/09

Print date :06/01/11

2/7

Sample identification

Name of the product : 942 DEPTIL PA 5

Batch : 01/08/01/9F

Appearance : Transparent limpid product

Receipt date : 05/02/09

Date of manufacture : 04/02/09

Expiration date :04/08/09

Active principle:

Not filled

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 142 NF EN 13697 (Novembre 2001)

Strain(s)	Neutralizing agent
Escherichia coli CIP 54.127-Col:CIP 54.127	G neutralizer
Pseudomonas aeruginosa DSM 939-Col:939	G neutralizer
Enterococcus hirae CIP 58.55-Col:CIP 58.55	G neutralizer
Staphylococcus aureus CIP 4.83-Col:CIP 4.83	B neutralizer

Appearance :

G neutralizer : (2 %) Sodium thiosulphate (g)

B neutralizer : (3 %) Polysorbate 80 (ml): (3 %) Saponine (α): (0.3 %) Lecithin (α): (0.1 %) L-Histidin (α): (0.5 %) Sodium thiosulphate (α)

Experimental conditions :

Test manager :A-F. GABILLET

Start of analysis : 11/02/09

End of analysis : 20/02/09

Tested concentrations of the product : 0,01 % (V/V)
0,1
0,3
0,5

Interfering substance : 134 Bovine albumin 0,3 g/l

Contact time : 5 (min)

Test temperature : 20 (°C)

Incubation temperature : 37 (°C)

Diluent described in the norm : Hard water

Stability of the mixture of interfering substance and diluted product : not concerned



Test certificat N° 1554-1

First print date : 20/02/09

Print date : 06/01/11

3/7

Results

Tested strain(s)	Validation test			Bactericidal or Fungicidal tested suspension	Operating method at the concentration %				
	Water control	Dilution-neutralization control	Neutralizer toxicity control			0,01	0,1	0,3	0,5
367 Escherichia coli CIP 54.127- Col:CIP 54.127	dil : 10 ⁻³ Vc : 83;91 n : 2	dil : 10 ⁻³ Vc : 149;122 n : 2	dil : 10 ⁻³ Vc : 106;61 n : 2		dil : 10 ⁻⁰ Vc : >300;>300 n : 0	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	
367 Escherichia coli CIP 54.127- Col:CIP 54.127	dil : 10 ⁻⁴ Vc : 12;10 n : 0	dil : 10 ⁻⁴ Vc : 16;9 n : 1	dil : 10 ⁻⁴ Vc : 8;10 n : 0		dil : 10 ⁻¹ Vc : >300;>300 n : 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	
367 Escherichia coli CIP 54.127- Col:CIP 54.127	dil : 10 ⁻⁵ Vc : 1;0 n : 0	dil : 10 ⁻⁵ Vc : 2;2 n : 0	dil : 10 ⁻⁵ Vc : 0;0 n : 0		dil : 10 ⁻² Vc : 34;57 n : 2	10 ⁻² 0;0 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	
367 Escherichia coli CIP 54.127- Col:CIP 54.127 Synthesis	Nc : 5,94 Nts : 25	NT : 6,13	NC : 5,92	10 ⁻⁶ Vc : >300;>300 n : 0 N : 7,27	10 ⁻⁷ 32;42 2	Nd : 4,66 ME : 1,28	< 0,1 ME>4	< 0,1 ME>4	< 0,1 ME>4

N: test suspension ;
NC: log number of cfu/ml per test surface of the neutralizer toxicity control ;
NT: log number of cfu/ml of the dilution-neutralization control ;
Nc: log number of cfu/ml per water control surface ;
Nd: log number of cfu/ml per test surface ;
Nts: growth observed on treated surface
ME: microbicidal effect

Methodology checked for :
* N-Nc is not greater than 2 lg ;
* N-NC is not greater than 2 lg ;
* NC-NT is not greater than ± 0.3 lg.



Test certificat N° 1554-1

First print date : 20/02/09

Print date : 06/01/11

Results

4/7

Tested strain(s)	Validation test			Bactericidal or Fungicidal tested suspension	Operating method at the concentration %					
	Water control	Dilution-neutralization control	Neutralizer toxicity control			0,01	0,1	0,3	0,5	
361 Pseudomonas aeruginosa DSM 939-Col:939	dil : 10 ⁻² Vc : >300;>300 n : 0	dil : 10 ⁻² Vc : >300;>300 n : 0	dil : 10 ⁻² Vc : >300;>300 n : 0		dil : 10 ⁻⁰ Vc : >300;>300 n : 0	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	
361 Pseudomonas aeruginosa DSM 939-Col:939	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0		dil : 10 ⁻¹ Vc : 43;41 n : 2	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	
361 Pseudomonas aeruginosa DSM 939-Col:939	dil : 10 ⁻⁴ Vc : 41;46 n : 2	dil : 10 ⁻⁴ Vc : 31;46 n : 2	dil : 10 ⁻⁴ Vc : 49;45 n : 2		dil : 10 ⁻² Vc : 3;6 n : 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	
361 Pseudomonas aeruginosa DSM 939-Col:939 Synthesis	Nc : 6,64 Nts : 21	NT : 6,59	NC : 6,67	10 ⁻⁶ Vc : 160;151 n : 2 N : 6,89	10 ⁻⁷ 11;14 0	Nd : 3,62 ME : 3,02	< 0,1 ME>4	< 0,1 ME>4	< 0,1 ME>4	

N: test suspension ;
NC: log number of cfu/ml per test surface of the neutralizer toxicity control ;
NT: log number of cfu/ml of the dilution-neutralization control ;
Nc: log number of cfu/ml per water control surface ;
Nd: log number of cfu/ml per test surface ;
Nts: growth observed on treated surface
ME: microbicidal effect

Methodology checked for :
* N-Nc is not greater than 2 lg ;
* N-NC is not greater than 2 lg ;
* NC-NT is not greater than à ± 0.3 lg.



Test certificat N° 1554-1

First print date : 20/02/09

Print date : 06/01/11

Results

5/7

Tested strain(s)	Validation test			Bactericidal or Fungicidal tested suspension	Operating method at the concentration %					
	Water control	Dilution-neutralization control	Neutralizer toxicity control			0,01	0,1	0,3	0,5	
366 Enterococcus hirae CIP 58.55-Col:CIP 58.55	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0		dil : 10 ⁻⁰ Vc : >300;>300 n : 0	10 ⁻⁰ >300;>300 0	10 ⁻⁰ >300;>300 0	10 ⁻⁰ 0;0 2	10 ⁻⁰ 0;0 2	
366 Enterococcus hirae CIP 58.55-Col:CIP 58.55	dil : 10 ⁻⁴ Vc : 84;71 n : 2	dil : 10 ⁻⁴ Vc : 86;78 n : 2	dil : 10 ⁻⁴ Vc : 76;76 n : 2		dil : 10 ⁻¹ Vc : >300;>300 n : 0	10 ⁻¹ >300;>300 0	10 ⁻¹ >300;>300 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	
366 Enterococcus hirae CIP 58.55-Col:CIP 58.55	dil : 10 ⁻⁵ Vc : 15;5 n : 1	dil : 10 ⁻⁵ Vc : 2;7 n : 0	dil : 10 ⁻⁵ Vc : 8;8 n : 0		dil : 10 ⁻² Vc : >300;>300 n : 0	10 ⁻² >300;>300 0	10 ⁻² >300;>300 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	
366 Enterococcus hirae CIP 58.55-Col:CIP 58.55	Nc : 6,89 Nts : >100	NT : 6,91	NC : 6,88	10 ⁻⁶ Vc : >300;>300 n : 0 N : 7,15	10 ⁻⁷ 29;28 2	Nd : >5,48 ME : ME<4	>5,48 ME<4	< 0,1 ME>4	< 0,1 ME>4	

N: test suspension ;
NC: log number of cfu/ml per test surface of the neutralizer toxicity control ;
NT: log number of cfu/ml of the dilution-neutralization control ;
Nc: log number of cfu/ml per water control surface ;
Nd: log number of cfu/ml per test surface ;
Nts: growth observed on treated surface
ME: microbicidal effect

Methodology checked for :
* N-Nc is not greater than 2 lg ;
* N-NC is not greater than 2 lg ;
* NC-NT is not greater than à ± 0.3 lg.



Test certificat N° 1554-1

First print date : 20/02/09

Print date : 06/01/11

6/7

Results

Tested strain(s)	Validation test			Bactericidal or Fungicidal tested suspension	Operating method at the concentration %					
	Water control	Dilution-neutralization control	Neutralizer toxicity control			0,01	0,1	0,3	0,5	
368 Staphylococcus aureus CIP 4.83-Col:CIP 4.83	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0	dil : 10 ⁻³ Vc : >300;>300 n : 0		dil : 10 ⁻⁰ Vc : >300;>300 n : 0	10 ⁻⁰ 0;0 0	10 ⁻⁰ 0;0 0	10 ⁻⁰ 0;0 0	10 ⁻⁰ 0;0 0	
368 Staphylococcus aureus CIP 4.83-Col:CIP 4.83	dil : 10 ⁻⁴ Vc : 60;64 n : 2	dil : 10 ⁻⁴ Vc : 50;41 n : 2	dil : 10 ⁻⁴ Vc : 70;53 n : 2		dil : 10 ⁻¹ Vc : >300;>300 n : 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	10 ⁻¹ 0;0 0	
368 Staphylococcus aureus CIP 4.83-Col:CIP 4.83	dil : 10 ⁻⁵ Vc : 5;3 n : 0	dil : 10 ⁻⁵ Vc : 5;5 n : 0	dil : 10 ⁻⁵ Vc : 7;6 n : 0		dil : 10 ⁻² Vc : >300;>300 n : 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	10 ⁻² 0;0 0	
368 Staphylococcus aureus CIP 4.83-Col:CIP 4.83 Synthesis	Nc : 6,79 Nts : >100	NT : 6,66	NC : 6,79	10 ⁻⁶ Vc : 213;224 n : 2 N : 7,04	10 ⁻⁷ 27;17 2	Nd : >5,48 ME : ME<4	< 0,1 ME>4	< 0,1 ME>4	< 0,1 ME>4	Nts : >100 0

N: test suspension ;
NC: log number of cfu/ml per test surface of the neutralizer toxicity control ;
NT: log number of cfu/ml of the dilution-neutralization control ;
Nc: log number of cfu/ml per water control surface ;
Nd: log number of cfu/ml per test surface ;
Nts: growth observed on treated surface
ME: microbicidal effect

Methodology checked for :
* N-Nc is not greater than 2 lg ;
* N-NC is not greater than 2 lg ;
* NC-NT is not greater than ± 0.3 lg.



Test certificate N° 1554-1

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

First print date :20/02/09

Print date :06/01/11

Conclusion :

7/7

In conformity with the norm NF EN 13697 (November 2001), 01/08/01/9F batch of DEPTIL PA 5 product of HYPRED SA firm, when diluted to 0.3% (V/V) in presence of Bovine albumin 0,3 g/l, presents a bactericidal activity on surfaces, for 5 minutes contact time, between 18 and 25°C, towards the strain(s) : Escherichia coli CIP 54.127, Pseudomonas aeruginosa DSM 939, Enterococcus hirae CIP 58.55, Staphylococcus aureus CIP 4.83.
Strains are preserved and checked according to EN 12353.

Comments :

Written by:	Approved by:
A-F. GABILLET Testing officer	M. SESQUES Technical director
on : 06/01/11	on : 06/01/11
Signature : 	Signature : 

Test certificate N° 253

Fungicidal efficiency test according to the norm NF EN 1650 (May 1998)

Address : _____

Address : HYPRED SA

Customer identity _____

Name : HYPRED SA
Address : 55 Bd Jules Verger

35 803 DINARD Cedex
Tel : 02-99-16-50-00 Fax : 02-99-16-50-20 E-mail : pmourcel@hypred.fr

Contact : _____


Surname : MOURCEL First name Philippe
Tel: 02-99-16-50-31 Fax : 02-99-16-52-75 E-mail: pmourcel@hypred.fr

Product : _____

Codification : 182 DEPTIL PA 5
Batch number : 4/9/22/2 - 45P98

Accreditation : _____

Accreditation
N° 1-1308



Accreditation of COFRAC test section proves competence of laboratories only for test covered by accreditation. If particular notifications have been made in the method of indicated, these modifications or specifications are listed in the part "Comment" at the end of the test certificate.

This test certificate concerns only the tested product.

Duplication of this test certificate is only authorised in it's entirety

This test certificate is composed of 4 pages (this page included)

ESSAIS



Test certificate N° 253

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 27/09/02

Print date : 14/03/08

2/4

Sample identification

Name of the product : 182 DEPTIL PA 5

Batch : 4/9/22/2 - 45P98

Appearance : clear colourless liquid

Receipt date : 09/07/02

Date of manufacture : 9/04/02

Active principle:

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 102 NF EN 1650

Test method : Dilution / neutralization

Strain(s)	Neutralizing agent
Aspergillus niger -Col:DSM 1988=1387	G neutralizer
Candida albicans DSM 1386-Col:1386	G neutralizer

Appearance :

G neutralizer : (2 %) Sodium thiosulphate (g)

Experimental conditions :

Test manager : A-F. GABILLET

Start of analysis : 24/07/02

End of analysis : 26/07/02

Tested concentrations of the product : 0,05 in % (V/V)

1

2

2,5

3

Interfering substance : 134 Bovine albumin 0,3 g/l

Contact time : 15 (in mn)

Test temperature : 20 (in °C)

Incubation temperature : 30 (in °C)

Diluent described in the norm : Hard water

Stability of the mixture of interfering substance and diluted product : No precipitate




Test certificate N° 253

First print date : 27/09/02

Print date : 14/03/08

Results

3/4

Tested strain(s)	Validation test				Bactericidal or Fungicidal tested suspension	Operating method at the concentration %				
	Bactericidal or Fungicidal suspension	Experimental conditions	Non toxicity of the neutraliser or reference filtration	Inactivation by dilution/neutralisation or filtration		0,05	1	2	2,5	3
145 Aspergillus niger -Col:DSM 1988=1387	Vc : 64;66 Nv: 650	Vc : 76;61 A: 69	Vc : 67;70 B: 69	Vc : 76;96 C: 86	10^{-5} 10^{-6} Vc : >150;>150 18;12 N: 18 000 000 N10 ⁷ 1,8 N10 ⁸ 0,2	Vc :  Na: 10 ⁴ 10 ⁵	>150;>150 >1500 R<10E4 R<10E5	2;1 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5
146 Candida albicans DSM 1386- Col:1386	Vc : 62;82 Nv: 720	Vc : 107;92 A: 100	Vc : 85;88 B: 87	Vc : 69;75 C: 72	10^{-5} 10^{-6} Vc : >150;>150 15;18 N: 16 500 000 N10 ⁷ 1,7 N10 ⁸ 0,2	Vc : >150;>150 Na: 10 ⁴ 10 ⁵	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5	0;0 < 150 R>10E4 R>10E5

Vc : Number of colonies on Petri dishes
N : CFU in the microbial tested suspension
Nv : CFU in the validation suspension
Na : CFU in assay mix

R : Viable cell reduction
A : CFU in experimental conditions
B : CFU in neutralizer non toxicity or filtration validation
C : CFU in dilution/neutralization or filtration validation



Test certificate N° 253

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 27/09/02



Print date : 14/03/08

4/4

Conclusion :

In conformity with the norm NF EN 1650 (May 1998), 4/9/22/2 - 45P98 batch of DEPTIL PA 5 product of HYPRED SA firm, when diluted at 2 % (V/V) in presence of Bovine albumin 0,3 g/l, presents a fungicidal activity for 15 minutes contact time, at 20 °C, towards the strain(s) : *Aspergillus niger*, *Candida albicans* DSM 1386. Strains are preserved and checked according to EN 12353.

Comments :

Written by:	Approved by:
A-F. GABILLET	M. THERAUD
on : 14/03/08	on : 14/03/08
Signature : 	Signature : 



Test certificate N° 263

Sporicidal efficiency test according

to the norm NF EN 13704 (April 2002)

Address : _____

Address : HYPRED SA

Customer identity _____

Name : HYPRED SA
Address : 55 Bd Jules Verger

35 803 DINARD Cedex
Tel : 02-99-16-50-00 Fax : 02-99-16-50-20 E-mail : pmourcel@hypred.fr

Contact : _____

Surname : MOURCEL First name Philippe
Tel: 02-99-16-50-31 Fax : 02-99-16-52-75 E-mail: pmourcel@hypred.fr

Product : _____

Codification : 182 DEPTIL PA 5
Batch number : 4/9/22/2 - 45P98



Test certificate N° 263

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 30/09/02

Print date : 14/03/08

2/4

Sample identification

Name of the product : 182 DEPTIL PA 5

Batch : 4/9/22/2 - 45P98

Appearance : clear colourless liquid

Receipt date : 09/07/02

Date of manufacture : 9/04/02

Active principle:

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 132 NF EN 13704

Test method : Dilution / neutralization

Strain(s)	Neutralizing agent
Spores de Bacillus subtilis-Col:CIP 52.62	Neutralizing agent B

Appearance :

Neutralizing agent B : (3 %) Polysorbate 80 (ml); (3 %) Saponine (g); (0,3 %) Lecithin (g); (0,1 %) L-Histidin (g); (0,5 %) Sodium thiosulphate (g)

Experimental conditions :

Test manager : A-F. GABILLET

Start of analysis : 10/09/02

End of analysis : 13/09/02

Tested concentrations of the product : 0,1 in % (V/V)
0,5
1
1,5
2

Interfering substance : 134 Bovine albumin 0,3 g/l

Contact time : 60 (in mn)

Test temperature : 20 (in °C)

Incubation temperature : 30 (in °C)

Diluent described in the norm : Hard water

Stability of the mixture of interfering substance and diluted product : No precipitate



Test certificate N° 263

First print date : 30/09/02

Print date : 14/03/08

Results

3/4

Tested strain(s)	Validation test				Bactericidal or Fungicidal tested suspension	Operating method at the concentration %				
	Bactericidal or Fungicidal suspension	Experimental conditions	Non toxicity of the neutraliser or reference filtration	Inactivation by dilution/neutralisation or filtration		0,1	0,5	1	1,5	2
164 Spores de Bacillus subtilis- Col:CIP 52.62	Vc : 188;169 Nv: 1785	Vc : 148;156 A: 152	Vc : 120;143 B: 132	Vc : 127;120 C: 124	10^{-4} 10^{-5} Vc : >300;>300 43;55 N: 4 900 000 N10 ⁶ 4,9 N10 ⁷ 0,5	Vc : >300;>300 Na ³ >3000 10 ³ R<10E3 10 ⁴ R<10E4	0;0 < 150 R>10E3 R>10E4	0;0 < 150 R>10E3 R>10E4	0;0 < 150 R>10E3 R>10E4	0;0 < 150 R>10E3 R>10E4

Vc : Number of colonies on Petri dishes
N : CFU in the microbial tested suspension
Nv : CFU in the validation suspension
Na : CFU in assay mix

R : Viable cell reduction
A : CFU in experimental conditions
B : CFU in neutralizer non toxicity or filtration validation
C : CFU in dilution/neutralization or filtration validation



Test certificate N° 263

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52

First print date : 30/09/02



Print date : 14/03/08

4/4

Conclusion :

In conformity with the norm NF EN 13704 (April 2002), 4/9/22/2 - 45P98 batch of DEPTIL PA 5 product of HYPRED SA firm, when diluted at 0,5 % (V/V) in presence of Bovine albumin 0,3 g/l, presents a sporicidal activity for 60 minutes contact time, at 20 °C, towards the strain(s) : Spores de Bacillus subtilis. Strains are preserved and checked according to EN 12353.

Comments :

Written by:	Approved by:
A-F. GABILLET	M. THERAUD
on : 14/03/08	on : 14/03/08
Signature : 	Signature : 



Test certificate N° 576

Sporicidal efficiency test according

to the norm : NF EN 13704 (April 2002)

Address : _____

Address : HYPRED SA

Customer identity _____

Name : HYPRED SA
Address : 55 Bd Jules Verger

35 803 DINARD Cedex

Tel : 02-99-16-50-00 **Fax :** 02-99-16-50-20 **E-mail :** pmourcel@hypred.fr

Contact : _____

Surname : MOURCEL **First name** Philippe

Tel : 02-99-16-50-31 **Fax :** 02-99-16-52-75 **E-mail:** pmourcel@hypred.fr

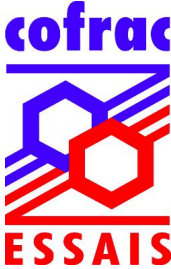
Product : _____

Codification : 429 **DEPTIL PA5**

Batch number : 1/26/7/5 (54P35)

Accreditation : _____

Accreditation
N° 1-1308



Accreditation of COFRAC test section proves competence of laboratories only for test covered by accreditation. If particular notifications have been made in the method of indicated , these modifications or specifications are listed in the part "Comment" at the end of the test certificate.

This test certificate concerns only the tested product .

Duplication of this test certificate is only authorised in it's entirely

This test certificate is composed of 4 pages (this page included)



Test certificate N° 576

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

First print date : 21/03/2005

Print date : 21/01/2008

2/4

Sample identification

Name of the product : 429 DEPTIL PA5

Batch : 1/26/7/5 (54P35)

Appearance : Transparent limpid product

Receipt date : 18/03/05

Date of manufacture : 26/01/2005

Active principle: hydrogen peroxide peracetic acid

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 132 NF EN 13704 (Avril 2002)

Test method : Dilution / neutralization

Strain(s)	Neutralizing agent
Spores of Bacillus subtilis-Col:CIP 52.62	Neutralizing agent B

Appearance :

Neutralizing agent B : (3 %) Polysorbate 80 (ml); (3 %) Saponine (g); (0,3 %) Lecithin (g); (0,1 %) L-Histidin (g); (0,5 %) Sodium thiosulphate (g)

Experimental conditions :

Test manager : A-F. GABILLET

Start of analysis : 18/03/05

End of analysis : 21/03/05

Tested concentrations of the product : 0,5 in % (V/V)
1
1,5
2
2,5

Interfering substance : 134 Bovine albumin 0,3 g/l

Contact time : 5 (in mn)

Test temperature : 20 (in °C)

Incubation temperature : 30 (in °C)

Diluent described in the norm : Hard water

Stability of the mixture of interfering substance and diluted product : No precipitate during assay

Test certificate N° 576

First print date : 21/03/2005

Print date : 21/01/2008

Results

3/4

Tested strain(s)	Validation test				Bactericidal or Fungicidal tested suspension	Operating method at the concentration %					
	Bactericidal or Fungicidal suspension	Experimental conditions	Non toxicity of the neutraliser or reference filtration	Inactivation by dilution/neutralisation or filtration		0,5	1	1,5	2	2,5	
232 Spores de Bacillus subtilis- Col:CIP 52.62	Vc : 157;178 Nv: 1675	Vc : 176;188 A: 182	Vc : 128;127 B: 128	Vc : 121;153 C: 137	10 ⁻⁴ Vc : 277;272 N: 2 663 636 N10 ⁶ N10 ⁷ 2,7 0,3	10 ⁻⁵ 18;19	Vc : >300;>300 Na ³ 10 ³ 10 ⁴ R<10E3 R<10E4	>300;>300 >3000 R<10E3 R<10E4	46;59 525 0.50735923E 0,1	0;0 < 150 R>10E3 R>10E4	0;0 < 150 R>10E3 R>10E4

Vc : Number of colonies on Petri dishes

N : CFU in the microbial tested suspension

Nv : CFU in the validation suspension

Na : CFU in assay mix

R : Viable cell reduction

A : CFU in experimental conditions

B : CFU in neutralizer non toxicity or filtration validation

C : CFU in dilution/neutralization or filtration validation



Test certificate N° 576

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

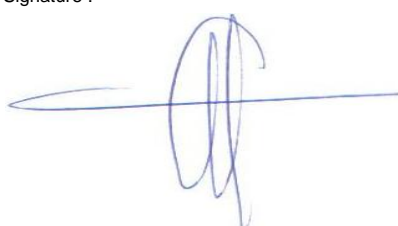
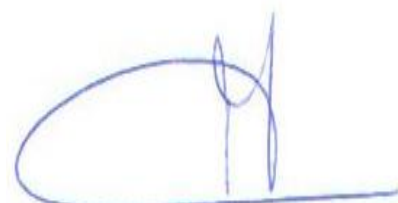
First print date : 21/03/2005

Print date : 21/01/2008

Conclusion :

4/4

In conformity with the norm NF EN 13704 (April 2002), 1/26/7/5 (54P35) batch of DEPTIL PA5 product of HYPRED SA firm, when diluted to 2% (V/V) in presence of bovine albumin 0,3 g/l, presents a sporicidal activity for 5 minute contact time, at 20 °C, towards the spores of Bacillus subtilis CIP 52.62.

Written by:	Approved by:
A-F. GABILLET	M. THERAUD
on : 21/01/08	on : 21/01/08
Signature : 	Signature : 



Test certificate N° 702

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

First print date : 07/11/2006

Print date : 10/04/2008

2/4

Sample identification

Name of the product : 499 DEPTIL PA5

Batch : 9/8/12/5

Appearance : Transparent limpid product

Receipt date : 08/09/2005

Date of manufacture : 08/09/2005

Active principle: peracetic acid

Diluent of the product recommended by the manufacturer : Tap water

Identification of the used method :

Method : 146 NF EN 13610 (Juillet 2003)

Test method :

Strain(s)	Neutralizing agent
Phage P001-Col:4262 Phage P008-Col:10567	K neutralizer K neutralizer

Appearance :

K neutralizer : (0,3 %) egg lecithin; (3 %) Polysorbate 80; (0,5 %) sodium thiosulfate; (0,1 %) L-histidine; (3 %) saponine; (100 %) Phage buffer (ml)

Experimental conditions :

Test manager : M. THERAUD

Start of analysis : 25/10/05

End of analysis : 26/10/05

Tested concentrations of the product : 0,01 in % (V/V)
0,05
0,1
0,2

Interfering substance : 251 10% curd

Contact time : 15 (in mn)

Test temperature : 20 (in °C)

Incubation temperature : 30 (in °C)

Diluent described in the norm : Hard water

Stability of the mixture of interfering substance and diluted product : No precipitate during assay

Results

Tested strain(s)	Validation test				Virucidal tested suspension	Operating method at the concentration %				
	Virucidal suspension	Experimental conditions	Non toxicity of the neutraliser or reference filtration	Inactivation by dilution/neutralisation or filtration			0,01	0,05	0,1	0,2
10E-1 : 10E0 : 253 Phage P001-Col:4262	Pc : 31;41	Pc : 32;27	Pc : 19;26	Pc : 6;5	Pc : 10^{-6} 82;84 10^{-7} 6;6 N.10 ⁹ : 0,83	Pc : >200;>200	24;40	4;2	0;14	
	Pc : >200;>200	Pc : >200;>200	Pc : 62;54	Pc : 63;62		Pc : >200;>200	>200;>200	0;0	14;8	
	Nv: 36000	A: 2950	B: 732	C: 625		Na: >1.10E6	16000	<7,5.10E3	<7,5.10E3	
						R.10 ⁴	R<10E4	0,5	R>10E4	R>10E4
10E-1 : 10E0 : 254 Phage P008-Col:10567	Pc : 27;18	Pc : 21;26	Pc : 1;8	Pc : 6;2	Pc : 10^{-6} 81;87 10^{-7} 10;9 N.10 ⁹ : 0,84	Pc : >300;>300	2;4	3;2	1;3	
	Pc : 194;199	Pc : 54;150	Pc : 24;28	Pc : 33;49		Pc : >300;>300	2;0	1;2	1;4	
	Nv: 19909	A: 1141	B: 260	C: 410		Na: >1,5.10E6	<7,5.10E3	<7,5.10E3	<7,5.10E3	
						R.10 ⁴	R<10E4	R>10E4	R>10E4	R>10E4

Pc : Number of plaques on Petri dishes
N : PFU in microbial tested suspension
Nv : PFU in validation microbial tested suspension
Na : PFU in assay mix

R : viable viruses reduction
A : PFU in experimental conditions
B : PFU in neutralizer non toxicity or filtration control validation
C : PFU in dilution/neutralization or filtration validation



Test certificate N° 702

55 Bd Jules Verger - 35 803 DINARD Cedex
Tél : +33 (0)2 99 16 50 72 - Fax : +33 (0)2 99 16 52 75

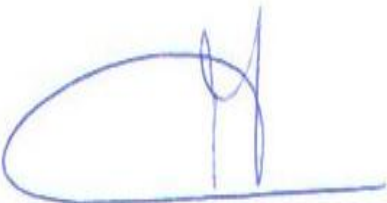
First print date : 07/11/2006

Print date : 10/04/2008

4/4

Conclusion :

In conformity with the norm NF EN 13610 (July 2003), 9/8/12/5 batch of DEPTIL PA5 product of HYPRED SA firm, when diluted to 0.1% (V/V) in presence of 10% curd, presents a virucidal activity for 15 minute contact time, at 20 °C, towards the phages P001 (DSM 4262) and P008 (DSM 10567), lytic for Lactococcus lactis sp. lactis (DSM 4366), preserved according to EN 12353.

Written by:	Approved by:
M. THERAUD	A-F. GABILLET
on : 10/04/08	on : 10/04/08
Signature : 	Signature : 