



centro ricerche-sviluppo e laboratori prove  
settori legno-arredo, ambiente e alimenti

CATAS S.p.A.  
Iscr. Reg. Imprese Udine  
nr. iscr. C.F. 01818850305  
Reg. Impr. UD 20663  
P. IVA : 01818850305  
C.Soc. € 984.250,00 i.v.

Sede: Via Antica, 24/3  
33048 S. Giovanni al Nat. UD  
Tel. 0432.747211 r.a.  
Fax 0432.747250  
http://www.catas.com  
lab@catas.com

Filiale:  
Via Braille, 5  
20851 Lissone MB  
Tel. 039.464567  
Fax 039.464565  
lissone@catas.com

### TEST REPORT

## 215578 / 1

Date received: 08/06/16

Date of test: 22/07/16

Date of issue: 09/01/17

Sample name: Radiata pine (Pinus radiata) thermally modified at 220°C

### Natural durability of solid wood against wood-destroying fungi - Part 1: Basidiomycetes UNI CEN/TS 15083-1:2005

Timber species: softwood, heat treated  
Sampling: done by the orderer  
Density of timber: 425 kg/m<sup>3</sup>  
Reference timber species: Pinus sylvestris, Fagus sylvatica  
Ageing procedure applied: none  
Method of sterilisation: gamma irradiation (25kGy)  
Species and strain number of test fungi: Coniophora puteana DSM 3085;  
Trametes versicolor DSM 3086

Duration of exposure to fungi: 16 weeks from 05/09/2016 to 27/12/2016  
Mean mass loss of reference timber: Pinus sylvestris 34%; Fagus sylvatica 21%  
Median mass loss of test timber: 6,51% with Coniophora puteana; 7,98% with Trametes versicolor  
Provisional durability class: 2, Durable  
Officer in charge of testing: Dr. Elena Conti

#### Notes:

- The provisional durability class was attributed in accordance with Annex D, Table D.1 of CEN TS 15083-1.

Durability class	Description	% loss in mass
1	Very durable	≤ 5
2	Durable	> 5 to ≤ 10
3	Moderately durable	> 10 to ≤ 15
4	Slightly durable	> 15 to ≤ 30
5	Not durable	> 30

#### Note:

- The interpretation and practical conclusions that can be drawn from this test report require a specific knowledge of timber.

*This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.*

Managing Director  
Dr. Andrea Giavon

The sample name and, when relevant, its description, are given by the orderer, and CATAS does not assume responsibility on this matter. This test report relates to the sample submitted for the test and no others. Additions, deletions or alterations are not permitted. This test report must always be reproduced in its entirety. Unless otherwise stated, sampling has been carried out by the orderer.

pag. 1/3



centro ricerche-sviluppo e laboratori prove  
settori legno-arredo, ambiente e alimenti

CATAS S.p.A.  
Iscr. Reg. Imprese Udine  
nr. iscr. C.F. 01818850305  
Reg. Impr. UD 20663  
P. IVA : 01818850305  
C.Soc. € 984.250,00 i.v.

Sede: Via Antica, 24/3  
33048 S. Giovanni al Nat. UD  
Tel. 0432.747211 r.a.  
Fax 0432.747250  
http://www.catas.com  
lab@catas.com

Filiale:  
Via Braille, 5  
20851 Lissone MB  
Tel. 039.464567  
Fax 039.464565  
lissone@catas.com

### TEST REPORT

**215578 / 1**

Date of issue:

09/01/17

Sample name:

Radiata pine (Pinus radiata) thermally modified at 220°C

Table 1  
Percentage mass loss of reference wood specimens

Pinus sylvestris with Coniophora puteana	mass loss (%)	Fagus sylvatica with Trametes versicolor	mass loss (%)
1	33,71	1	23,47
2	32,39	2	25,04
3	36,30	3	18,48
4	35,27	4	25,33
5	34,33	5	19,27
6	33,73	6	26,49
7	32,25	7	16,51
8	33,18	8	20,19
9	31,52	9	21,69
10	37,60	10	18,89
<b>mean</b>	<b>34,03</b>	<b>mean</b>	<b>21,54</b>

Note: test valid

Table 2  
Moisture content of test wood specimens exposed to fungi

with Coniophora puteana	humidity (%) mean / lowest / highest	with Trametes versicolor	humidity (%) mean / lowest / highest
30 specimens	23/10/44	30 specimens	32/16/67

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

  
Managing Director  
Dr. Andrea Giavon



centro ricerche-sviluppo e laboratori prove  
settori legno-arredo, ambiente e alimenti

CATAS S.p.A.  
Iscr. Reg. Imprese Udine  
nr. iscr. C.F. 01818850305  
Reg. Impr. UD 20663  
P. IVA : 01818850305  
C.Soc. € 984.250,00 i.v.

Sede: Via Antica, 24/3  
33048 S. Giovanni al Nat. UD  
Tel. 0432.747211 r.a.  
Fax 0432.747250  
http://www.catas.com  
lab@catas.com

Filiale:  
Via Braille, 5  
20851 Lissone MB  
Tel. 039.464567  
Fax 039.464565  
lissone@catas.com

**TEST REPORT**

**215578 / 1**

Date of issue:

09/01/17

Sample name:

Radiata pine (Pinus radiata) thermally modified at 220°C

Table 3  
Percentage mass loss of test wood specimens exposed to fungi

with Coniophora puteana	mass loss (%)	with Trametes versicolor	mass loss (%)
1	1,70	1	9,23
2	2,61	2	8,86
3	8,77	3	6,80
4	2,92	4	7,99
5	6,60	5	10,07
6	11,24	6	3,75
7	4,99	7	4,24
8	2,69	8	5,83
9	4,62	9	7,03
10	12,84	10	11,56
11	13,67	11	7,21
12	8,94	12	3,98
13	12,25	13	4,01
14	5,65	14	9,54
15	3,45	15	8,98
16	7,93	16	7,98
17	5,45	17	8,19
18	3,45	18	11,08
19	10,56	19	7,62
20	5,56	20	4,10
21	4,62	21	8,32
22	11,63	22	9,58
23	9,10	23	8,17
24	7,11	24	5,25
25	6,42	25	3,63
26	15,42	26	8,48
27	8,15	27	7,12
28	5,87	28	9,71
29	3,25	29	lost
30	15,58	30	lost
<b>median</b>	<b>6,51</b>	<b>median</b>	<b>7,98</b>

This document is validated by digital signature and time stamping in accordance with the Italian laws and the European Directives which regulate the electronic signature systems.

  
Managing Director  
Dr. Andrea Giavon