

Name: *Pseudonocardia dioxanivorans*

Authors: Mahendra and Alvarez-Cohen 2005

Status: New Species

Literature: Int. J. Syst. Evol. Microbiol. 55:597

Risk group: 1 (German classification)

Type strain: DSM 44775, ATCC 55486

Author(s) Mahendra, S., Alvarez-Cohen, L.
Title *Pseudonocardia dioxanivorans* sp. nov., a novel
actinomycete that grows on 1,4-dioxane.
Journal Int. J. Syst. Evol. Microbiol.
Volume 55
Page(s) 593-598
Year 2005

Genus: *Pseudonocardia*

FH 6551

Species: *dioxanivorans*

Numbers in other collections: DSM 44775

Morphology:

| | | |
|--------------|-------|----------------|
| | G | R |
| <u>ISP 2</u> | good | saffron yellow |
| | A | SP |
| | cream | none |
| | G | R |
| <u>ISP 3</u> | good | colorless |
| | A | SP |
| | cream | none |
| | G | R |
| <u>ISP 4</u> | good | colorless |
| | A | SP |
| | cream | none |
| | G | R |
| <u>ISP 5</u> | good | colorless |
| | A | SP |
| | cream | none |
| | G | R |
| <u>ISP 6</u> | good | saffron yellow |
| | A | SP |
| | cream | none |
| | G | R |
| <u>ISP 7</u> | good | colorless |
| | A | SP |
| | good | salmon orange |

Melanoid pigment: - - - -

NaCl resistance: %

Lysozyme resistance:

pH: Value- Optimum-

Temperature : Value- Optimum- 28 °C

Carbon utilization:

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ara | Suc | Xyl | Ino | Man | Fru | Rha | Raf | Cel |
| ++ | + | + | + | - | - | - | + | + | + |

Enzymes:

| | | | | | | | | | |
|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|
| 2+ | 3+ | 4+ | 5- | 6+ | 7(+) | 8- | 9- | 10- | 11+ |
| 12- | 13- | 14- | 15- | 16+ | 17- | 18- | 19- | 20- | |

Comments:



Pseudonocardia dioxanivorans

A and B – Agar plates medium 5265 and 5315



Pseudonocardia dioxanivorans

C and D – Microplate with ISP- and melanin media