

**Table 2B-4. Zone Diameter and MIC Breakpoints for *Stenotrophomonas maltophilia***

Testing Conditions		QC Recommendations
<b>Medium:</b>	Disk diffusion: MHA Broth dilution: CAMHB; iron-depleted CAMHB for cefiderocol (see Appendix H, section H1) <sup>1</sup> Agar dilution: MHA	Refer to the following: <ul style="list-style-type: none"> <li>• Tables 4A-1, 5A-1, and 5A-2 that list acceptable QC ranges applicable for each method</li> <li>• Appendix I to develop a QC plan</li> </ul> When a commercial test system is used for antimicrobial susceptibility testing, refer to the manufacturer's instructions for QC strains and QC ranges.
<b>Inoculum:</b>	Broth culture method or colony suspension, equivalent to a 0.5 McFarland standard	
<b>Incubation:</b>	35°C ± 2°C; ambient air; 20-24 hours, all methods	

Refer to Table 3D for additional testing recommendations, reporting suggestions, and QC.

**General Comments**

- (1) Refer to Table 1B-4 for antimicrobial agents that should be considered for testing and reporting by microbiology laboratories.
- (2) For disk diffusion, test a maximum of 12 disks on a 150-mm plate and no more than 6 disks on a 100-mm plate; disks should be placed no less than 24 mm apart, center to center (see CLSI M02<sup>2</sup>). Each zone diameter should be clearly measurable; overlapping zones prevent accurate measurement. Measure the diameter of the zones of complete inhibition (as judged by the unaided eye), including the diameter of the disk (see CLSI M02-Ed14-QG<sup>3</sup>). Hold the Petri dish a few inches above a black background illuminated with reflected light. The zone margin should be considered the area showing no obvious, visible growth that can be detected with the unaided eye. Ignore faint growth of tiny colonies that can be detected only with a magnifying lens at the edge of the zone of inhibited growth. With trimethoprim and the sulfonamides, antagonists in the medium may allow some slight growth; therefore, disregard slight growth (20% or less of the lawn of growth) and measure the more obvious margin to determine the zone diameter.

**NOTE:** Information in boldface type is new or modified since the previous edition.

**Table 2B-4. *Stenotrophomonas maltophilia* (Continued)**

Antimicrobial Agent	Disk Content	Interpretive Categories and Zone Diameter Breakpoints, Nearest Whole mm			Interpretive Categories and MIC Breakpoints, µg/mL			Comments
		S	I	R	S	I	R	
<b>β-LACTAM COMBINATION AGENTS</b>								
Ticarcillin-clavulanate*	–	–	–	–	≤ 16/2	32/2-64/2	≥ 128/2	
<b>CEPHEMS (PARENTERAL) (Including cephalosporins I, II, III, and IV. Please refer to Glossary I.)</b>								
Cefiderocol	30 µg	≥ 17	–	–	≤ 1	–	–	<b>(3)</b> Breakpoints are based on PK/PD properties, MIC distributions, and limited clinical data. <b>(4)</b> The accuracy and reproducibility of cefiderocol testing results by disk diffusion and broth microdilution are markedly affected by iron concentration and inoculum preparation and may vary by disk and media manufacturer. Depending on the type of variance observed, false-resistant or false-susceptible results may occur. Testing subsequent isolates is encouraged. Discussion with prescribers and antimicrobial stewardship members regarding the potential for inaccuracies is recommended.
<b>TETRACYCLINES</b>								
Minocycline	30 µg	≥ 26	21-25	≤ 20	≤ 1	2	≥ 4	
<b>FLUOROQUINOLONES</b>								
Levofloxacin	5 µg	≥ 17	14-16	≤ 13	≤ 2	4	≥ 8	<b>(5) Rx:</b> Levofloxacin should not be used alone for antimicrobial therapy.
<b>FOLATE PATHWAY ANTAGONISTS</b>								
Trimethoprim-sulfamethoxazole	1.25/23.75 µg	≥ 16	11-15	≤ 10	≤ 2/38	–	≥ 4/76	<b>(6) Rx:</b> Trimethoprim-sulfamethoxazole should not be used alone for antimicrobial therapy.
<b>PHENICOLS</b>								
Chloramphenicol*	–	–	–	–	≤ 8	16	≥ 32	<b>(7)</b> Not routinely reported on organisms isolated from the urinary tract.

Abbreviations: CAMHB, cation-adjusted Mueller-Hinton broth; I, intermediate; MHA, Mueller-Hinton agar; MIC, minimal inhibitory concentration; PK/PD, pharmacokinetic/pharmacodynamic; QC, quality control; R, resistant; S, susceptible.

Symbol: \*, designation for “Other” agents that are not included in Tables 1 but have established clinical breakpoints.

Table 2B-4. *Stenotrophomonas maltophilia* (Continued)

References for Table 2B-4

- <sup>1</sup> Hackel MA, Tsuji M, Yamano Y, Echols R, Karlowsky JA, Sahm DF. Reproducibility of broth microdilution MICs for the novel siderophore cephalosporin, cefiderocol, determined using iron-depleted cation-adjusted Mueller-Hinton broth. *Diagn Microbiol Infect Dis*. 2019;94(4):321-325. doi:10.1016/j.diagmicrobio.2019.03.003
- <sup>2</sup> CLSI. *Performance Standards for Antimicrobial Disk Susceptibility Tests*. 14th ed. CLSI standard M02. Clinical and Laboratory Standards Institute; 2024.
- <sup>3</sup> CLSI. *M02 Disk Diffusion Reading Guide*. 2nd ed. CLSI quick guide CLSI M02-Ed14-QG. Clinical and Laboratory Standards Institute; 2024.