



检测报告

报告编号: XMF19-004328-01

报告日期: 2020-01-10

客户名称: 中船重工(沈阳)抗微生物科技有限公司  
客户地址: 辽宁省沈阳市和平区十三纬路 23-5 号  
样品名称: 抗微生物助剂  
样品批号: /  
生产日期: /  
生产商: /

以上样品及信息由客户提供及确认, SGS 不承担证实客户提供信息的准确性、适当性和(或)完整性责任。

样品接收日期: 2019 年 11 月 13 日  
检测周期: 2019 年 11 月 13 日-2019 年 12 月 23 日  
检测要求: 根据客户要求检测  
检测方法: 请参见下一页  
检测结果: 请参见下一页

本报告以中文为准。

除非另有说明, 本检测结果仅与被检测物品有关。仅供客户内部使用, 不对社会具有证明作用。未经检验机构书面同意, 委托人不得擅自使用检测结果进行不当宣传。

#### 结论:

依据《GB/T 13267-1991 水质 物质对淡水鱼(斑马鱼)急性毒性测定方法》, 在本实验条件下, 稀释后的受试样品锌离子抗菌剂水溶液未对斑马鱼表现出急性毒性效应, 稀释十万倍后的受试样品锌离子抗菌剂对斑马鱼的 96h-LC<sub>50</sub>>100mg/L。



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**检测样品描述:**

样品编号	SGS样品ID	描述
1	XMF19-004328.001	瓶装物

**检测结果**

1. 检测依据: GB/T 13267-1991 水质 物质对淡水鱼(斑马鱼)急性毒性测定方法
2. 检测项目: 鱼类急性毒性试验(不含受试样品分析)
3. 样品处理: 称取 0.1g 样品用标准稀释水逐级稀释十万倍, 称取 1g 稀释后样品溶液加入到 1L 容量瓶中, 加入标准稀释水定容摇匀得到 1000mg/L 试验母液, 1mg/L、10 mg/L 和 100 mg/L 三个浓度试验溶液分别由母液稀释得到。
4. 检测生物: 斑马鱼( Brachydanio rerio), 批号为 BMY20190813, 平均体长 2.5cm-3.0cm。实验开始前在本实验室已驯养 14 天, 且在与试验用水相同的水质中适应 7 天。
5. 检测环境: 每天光照 12h, 实验温度 23.0°C-25.0°C。
6. 检测用水: 标准稀释水, 水硬度为 249mg/L(水硬度计 200738JWK610), pH 值为 7.89(酸度计 delta320 编号 200738As8011)。
7. 空白对照: 标准稀释水
8. 检测方法: 试验采用半静态试验方法, 每 24h 更换一次实验溶液, 每次至少更换溶液总体积的 3/4, 试验周期共 96h, 试验期间不喂食。试验设置 1mg/L、10mg/L 和 100mg/L 三个受试样品浓度组, 另设空白对照组。参考毒物重铬酸钾设置 110mg/L、150mg/L、220mg/L、300mg/L 和 420mL 五个浓度组。每个试验装置放入 5L 实验溶液和 10 尾鱼。实验开始后每天观察并记录实验鱼的中毒症状和死亡情况。
9. 结果: 空白对照组和受试样品组实验鱼在实验开始后 24、48h、72h 和 96h 内均未出现异常和死亡。

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## 附表 1 鱼类急性毒性检测结果

检测条件:半静态

检测浓度 mg/L	实验鱼数量 (尾)	斑马鱼死亡数量(尾)				96h 死亡率 (%)
		24h	48h	72h	96h	
0	10	0	0	0	0	0
1	10	0	0	0	0	0
10	10	0	0	0	0	0
100	10	0	0	0	0	0

## 附表 2 检测水质监测记录表

检测浓度 mg/L	0h		24h		48h		72h		96h	
	pH	溶解氧 (%)								
0	7.89	97.2	7.80	81.2	7.58	80.5	7.60	83.6	7.49	83.7
1	7.86	97.7	7.92	84.7	7.45	83.3	7.81	81.1	7.62	82.0
10	7.81	96.8	7.64	83.2	7.74	81.9	7.63	85.0	7.57	84.9
100	7.69	97.9	7.78	75.1	7.39	85.6	7.55	82.9	7.80	80.2

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## 附表 3 重铬酸钾鱼类急性毒性检测结果

检测条件:静态

检测浓度 mg/L	实验鱼数量 (尾)	斑马鱼死亡数量 (尾)	24h 死亡率 (%)
		24h	
0	10	0	0
110	10	0	0
150	10	1	10
220	10	5	50
300	10	8	80
420	10	10	100
LC <sub>50</sub>	233.8mg/L	95%置信期间	200.7mg/L~274.7mg/L

备注:

1. 检测项目由宁波海关技术中心实验室执行。

\*\*\* 报告结束 \*\*\*



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