



**Table 9: Wound cleansing solution options**

Wound cleansing solution	Fluid type	Safety profile	Comments
Potable tap water	Hypotonic	<ul style="list-style-type: none"> <li>No cytotoxicity</li> <li>Not sterile</li> </ul>	<ul style="list-style-type: none"> <li>Generally inert solution that varies in content.<sup>1</sup></li> <li>Effect achieved through mechanical detachment of contaminants.<sup>2</sup></li> <li>Safe alternative when sterile solutions are not available or feasible (e.g., low resource settings or community settings).<sup>3</sup></li> <li>In low resource settings with non-potable water, boiled and cooled water is an alternative.<sup>4</sup></li> <li>When using potable tap water, run the tap to remove contaminants before using the water.<sup>5</sup></li> </ul>
Sterile normal 0.9% saline	Isotonic	No cytotoxicity	<ul style="list-style-type: none"> <li>Inert, isotonic solution with no antimicrobial properties.<sup>1</sup></li> <li>Effect achieved through mechanical detachment of contaminants.<sup>2</sup></li> <li>Once opened, product is no longer sterile.<sup>6</sup></li> </ul>
Sterile water	Hypotonic	No cytotoxicity	<ul style="list-style-type: none"> <li>Inert, hypotonic solution with no antimicrobial properties.<sup>1</sup></li> <li>Effect achieved through mechanical detachment of contaminants.<sup>2</sup></li> <li>Once opened, product is no longer sterile.<sup>6</sup></li> </ul>
Surfactant wound cleansers (e.g., Poloxamer 407, undecylenamido-propyl betaine and macrogolum)	Surfactant	Low cytotoxicity to fibroblasts and keratinocytes <i>in vitro</i> <sup>7</sup>	<ul style="list-style-type: none"> <li>Categorised based on type of chemical charge.<sup>8</sup></li> <li>Commonly combined with antimicrobial/antimicrobially-preserved agents including octenidine dihydrochloride (OCT) or polyhexamethylene biguanide (PHMB).</li> <li>Removes bacteria without damage to healing wound tissues.<sup>7</sup></li> </ul>
Super-oxidised solutions (hypochlorous acid and sodium hypochlorite are present as antimicrobial preservatives)	Hypotonic	Varies, see <i>Table 11</i>	<ul style="list-style-type: none"> <li>Contain naturally occurring hypotonic, oxidising agents<sup>9</sup></li> <li>Antimicrobial and antibiofilm action varies, see <i>Table 11</i></li> </ul>
Povidone iodine	<ul style="list-style-type: none"> <li>Antiseptic</li> <li>Iodophor</li> </ul>	Dose dependent cytotoxic effect on osteoblasts, myoblasts and fibroblasts. <sup>10, 11</sup>	<ul style="list-style-type: none"> <li>Antiseptic solution</li> <li>Broad spectrum antimicrobial<sup>11-15</sup> and antibiofilm<sup>11-13</sup> action, see <i>Table 11</i></li> </ul>
Other agents containing antimicrobials and/or active preservatives	Varies	Varies, see <i>Table 11</i>	<ul style="list-style-type: none"> <li>Range of antimicrobial/antimicrobially-preserved agents, less commonly used solely as a cleansing agent, see <i>Table 11</i></li> </ul>

## Table 09 References

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