# **PRODUCT** INFORMATION



## **Bromosulfalein**

Item No. 21058

CAS Registry No.:	71-67-0	
Formal Name:	3,3'-(4,5,6,7-tetrabromo-3-oxo-1(3H)-	5
	isobenzofuranylidene)bis[6-hydroxy-	Br
	benzenesulfonic acid, disodium salt	Br J
Synonyms:	Bromosulfophthalein,	
	Bromosulphalein,	
	Sulfobromophthalein,	Br
	Sulphobromophthalein	
MF:	C <sub>20</sub> H <sub>8</sub> Br <sub>4</sub> O <sub>10</sub> S <sub>2</sub> ● 2Na	Br
FW:	838.0	
Purity:	≥95%	
UV/Vis.:	λ <sub>max</sub> : 230 nm	S'
Supplied as:	A crystalline solid	O OH
Storage:	-20°C	
Stability:	≥4 years	

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

Bromosulfalein is supplied as a crystalline solid. A stock solution may be made by dissolving the bromosulfalein in the solvent of choice. Bromosulfalein is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of bromosulfalein in these solvents is approximately 5 mg/ml. Bromosulfalein is also slightly soluble in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of bromosulfalein can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of bromosulfalein in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

Bromosulfalein has been commonly used as both a substrate and inhibitor of organic anionic transporting polypeptide 1B1 (OATP1B1), OATP1B3, OATP1A2, and OATP2B1, as well as multidrug resistance protein 2 (MDR2).<sup>1-6</sup> It has also been used for *in vivo* studies of liver and biliary system function and as an anionic dye for the quantitative estimation of protein levels in tissue homogenates or purified samples.<sup>7-9</sup>

## References

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- 5. Zhang, J., Zhang, M., Sun, B., et al. J. Neurochem. 131(6), 791-802 (2014).
- 6. Matsson, P., Pedersen, J.M., Norinder, U., et al. Pharm Res. 26(8), 1816-1831 (2009).
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- 8. Oh, J.H., Park, S.E., Shim, C.K., et al. Biopharm. Drug. Dispos. 30(2), 94-98 (2009).
- 9. McGuire, J.C., Taylor, P., and Greene, L.A. Anal. Biochem. 83(1), 75-81 (1977).

# WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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