

 $\cap \square$ 

ONa

ONa

1



# **POPSO disodium salt**

## **Product Description**

Name :	POPSO disodium salt	J Ω
Catalog Number :	Piperazine-N,N'-bis(2-hydroxypropanesulfonic acid) 692232, 100 g	
Structure :	$C_{10}H_{20}N_2O_8S_2Na_2$	
	CAS: [108321-07-9]	<sup>∼</sup> N <sup>∕</sup> O
Molecular Weight :	MW= 406.4	└ <u> </u>
Storage:	Room temperature	Ŭ ÖH Ö

# **Technical and Scientific Information**

Many traditional buffering systems, like carbonate and phosphate buffers, while useful for some applications, are often not appropriate for many biological systems. These reagents do not buffer effectively above pH 7.5, and can interfere with some biological reactions. Some of the early alternatives, such as Tris and glycylalycine, buffer effectively at higher pH levels but often show cytotoxic effects. These buffers are also of very limited use below pH 7.5.

Good *et al.* (1966) developed a group of zwitterionic buffers that addressed the above limitations. Their pKa values are at or near physiological pH; they are non-toxic to cells; and they are not absorbed through cell membranes. Furthermore, these buffers do not significantly absorb ultraviolet light, and they are relatively inexpensive. These so-called "Good's Buffers" are widely used in cell culture and other biological applications. Since then, additional zwitterionic buffers (AMPSO, CAPSO, DIPSO, HEPPSO, MOPSO, and POPSO) have been developed. These compounds offer even further improvements in water solubility, high chemical stability, and compatibility in a number of biological systems (Ferguson *et al.*, 1980).

#### References

LIFE SCIENCES

- Good, N. E., et al. (1966) Biochemistry 5: 467
- Ferguson, W. J., et al. (1980) Anal. Biochem. 104: 300

## **Ordering information**

Catalog size quantities and prices may be found at <u>http://www.interchim.com</u>. Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06 **Disclaimer :** Materials from Uptima are sold **for research use only**, and are not intended for food, drug, household, or cosmetic uses. Uptima is not liable for any damage resulting from handling or contact with this product.