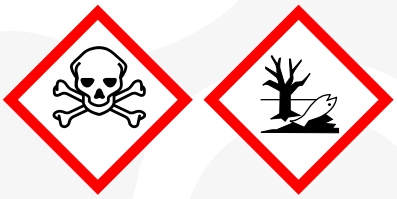
Specification

Cacodylic Acid Sodium Salt 3-hydrate *BioChemica* A2140

Solubility:	2000 g/L (H_2O)
Physical Description:	Solid
Product Code:	A2140
Product Name:	Cacodylic Acid Sodium Salt 3-hydrate *BioChemica*
Specifications:	Assay (titr.): min. 98 % Solubility (10 %; H_2O): clear, colorless Chloride: max. 0.002 % Sulfate: max. 0.002 % Cd: max. 0.005 % Cu: max. 0.005 % Fe: max. 0.005 % Pb: max. 0.005 % Zn: max. 0.005 %
Hazard pictograms	
UN:	1688
Class/PG:	6.1/II
ADR:	6.1/II
IMDG:	6.1/II
IATA:	6.1/II
WGK:	3
Storage:	RT

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Signal Word:	Danger
GHS Symbols:	GHS06 GHS09
H Phrases:	H301+H331 H410
P Phrases:	P261 P301+P310 P321 P330 P405 P501
Molecular Formula:	$C_2H_6AsNaO_2 \cdot 3H_2O$
M:	214.03 g/mol
CAS:	6131-99-3
EINECS:	204-708-2
CS:	29319000
Index Nr.:	033-002-00-5

Comment

Sodium cacodylate is a widely used buffer for different assays\: (I) enzyme reaction buffer (e. g. ref. 1, 4)\: labeling of DNA at the 3' end with [α-^{32}P]ddATP in 140 mM sodium cacodylate buffer (pH 7.2, ref. 4; pH 6.8 ref. 1) and terminal transferase; (II) reaction buffer for the chemical modification / cleavage, e. g. for the sequencing of DNA (50 mM, pH 8.0, ref. 5); (III) fixation of tissue, membranes and cells with glutaraldehyde or formaldehyde, respectively, in fixation buffer (e. g. ref. 2, 3). The working concentration ranges from 10 - 50 mM and a pH value of 7.2. Please note, that cacodylate inhibits the alkaline phosphatase in a concentration dependent manner in the cytochemical assay for this enzyme. As an alternative, the authors recommend the use of a NaOH-Pipes buffer (2)

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Bibliography

(1)Okayma, H. & Berg, P. (1982) *Mol. Cell. Biol.* **2**, 161-170High-efficiency cloning of full-length cDNA. (2)Yamamoto, K. & Ogawa, K. (1983) *Histochemistry* **77**, 339-351Effects of NaOH-PIPES buffer used in aldehyde fixative on alkaline Phosphatase activity in rat hepatocytes. (3)Hardham, A.R. (1985) *J. Histochem. Cytochem.* **33**, 110-118Studies on the cell surface of zoospores and cysts of the fungus *Phytophthora cinnamomi*\: The influence of fixation on patterns of Lectin binding. (4)Cobianchi, F. & Wilson, S.H. (1987) *Methods Enzymol.* **152**, 94-110Enzymes for modifying and labeling DNA and RNA. (5)Ambrose, B.J.B. & Pless, R.C. (1987) *Methods Enzymol.* **152**, 522-538DNA Sequencing\: Chemical methods. (6)McCarthy, J.G. *et al.* (1990) *Biochemistry* **29**, 6071-6081Chemical reactivity of potassium permanganate and diethyl pyrocarbonate with B DNA\: Specific reactivity with short A-tracts.

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