

Certificate of Analysis

HR2-575 (page 1)

Description

Optimize™ reagents are preformulated macromolecular crystallization grade solutions designed specifically for the crystallization of proteins, peptides, and nucleic acids. Each Optimize solution is formulated using high purity salts, polymers, and buffers. Sterile filtered Optimize reagents are formulated at convenient ready to use concentrations.

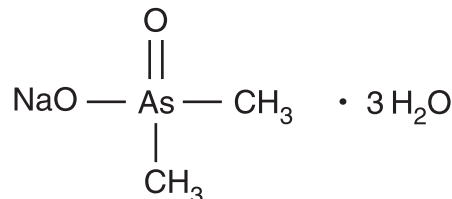
Optimize reagents remove the guesswork and make the process of reproducing preliminary screening conditions and general optimization faster, easier, and more convenient. When using Optimize reagents the user moves directly from the screen to the optimization with no time wasted searching for and formulating salts, buffers, and viscous polymers. This Certificate of Analysis indicates the quality and performance of the reagent.

Buffer Titration

The following table can be used to determine the appropriate mix of 1.0 M Sodium cacodylate trihydrate and 1.0 M HCl to give the desired pH. The volumes supplied below assume one will have a final buffer concentration of 0.1 M in a final reservoir volume of 1,000 microliters. This buffer will give pH values ± 0.01 at a temperature of 25°C.

Titration Table for 1.0 M Sodium cacodylate trihydrate with 1.0 M Hydrochloric acid

pH	1.0 M HCl (μl)	1.0 M Sodium cacodylate trihydrate (μl)
5.0	94	100
5.1	92	100
5.2	90	100
5.3	87	100
5.4	83	100
5.5	79	100
5.6	75	100
5.7	70	100
5.8	66	100
5.9	61	100
6.0	55	100
6.1	50	100
6.2	45	100
6.3	40	100
6.4	35	100
6.5	30	100
6.6	26	100
6.7	22	100
6.8	18	100
6.9	14	100
7.0	11	100
7.1	8	100
7.2	6	100
7.3	5	100
7.4	4	100



Property Test

Product Name

Synonyms

Product Number

Lot Number

Formula

Formula Weight (M_r)

CAS Number

EC Number

Beilstein Registry Number

Merck

RTECS

MDL Number

PubChem Substance ID

Purity

UN Number (RIDADR)

Appearance (Starting Material)

Appearance (Solution)

Titration (NT) HClO₄ 0.1 N Range

pKa

Refractive Index

Refractive Index Range

pH

pH Range

Conductivity

Conductivity Range

Lot (Sample) Results

1.0 M Sodium cacodylate trihydrate

Cacodylic acid sodium salt trihydrate

Dimethylarsinic acid sodium salt

Dimethylarsonic acid sodium salt

HR2-575

C₂H₆AsNaO₂ · 3H₂O

(CH₃)₂AsO₂Na · 3H₂O

214.03

[6131-99-3]

204-708-2

3702348

14,8595

CH7890000

MFCD00149079

24892242

≥ 98.0%

UN 1688 6.1/PG 2

White powder

Clear, Colorless to very light yellow

98.9 - 100.7%

6.27 at 25°C

_____ at 20°C

1.35556 - 1.35635 at 20°C

_____ at 25°C

8.4 - 8.5 at 25°C

_____ mS/cm at 25°C

33.7 - 36.5 mS/cm at 25°C

Technical Support

Inquiries regarding Optimize reagent formulation, interpretation of screen results, optimization strategies and general inquiries regarding crystallization are welcome. Please e-mail, fax, or telephone your request to Hampton Research. Fax and e-mail Technical Support are available 24 hours a day. Telephone technical support is available 8:00 a.m. to 4:30 p.m. USA Pacific Standard Time.

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