# PRODUCT INFORMATION



# 1-(Ethoxycarbonylmethyl)-6-methoxyquinolinium (bromide)

Item No. 19585

CAS Registry No.: 162558-52-3

Formal Name: 1-(2-ethoxy-2-oxoethyl)-

6-methoxy-quinolinium,

monobromide

Synonyms: **MQAE** 

MF:  $C_{14}H_{16}NO_3 \bullet Br$ 

FW: 326.2 **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 255, 319, 353 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

# **Laboratory Procedures**

1-(Ethoxycarbonylmethyl)-6-methoxyquinolinium (bromide) (MQAE) is supplied as a crystalline solid. A stock solution may be made by dissolving the MQAE in the solvent of choice. MQAE is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of MQAE in these solvents is approximately 16, 20, and 12 mg/ml, respectively.

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 MQAE can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of MQAE in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

MQAE is a fluorescent indicator dye that can be used to measure intracellular and extracellular chloride concentrations (absorption/emission max: 350/460 nm).1 lt detects the ion via diffusion-limited collisional quenching.

#### Reference

1. Sabnis, R.W. Handbook of biological dyes and stains: Synthesis and industrial applications. John Wiley & Sons, Inc., Hoboken, NJ, USA (2010).

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

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.

## WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

## **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM