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## **PRODUCT AND SAFETY DATA SHEET**

**PRODUCT NAME:** 

**MQAE** (N-(ethoxycarbonylmethyl)-6-methoxyquinolinium bromide)

CATALOG #: 52011

 $\begin{array}{c} \mathsf{CH}_3\mathsf{O} \\ & \\ \mathsf{N}^+ \\ \mathsf{CH}_2\mathsf{C}^-\mathsf{O}\mathsf{CH}_2\mathsf{CH}_3 \\ \mathsf{O} \\ \end{array}$ 

| PROPERTIES:                 |   |
|-----------------------------|---|
| Color & Form                | Light brown solid   |
| Purity                      | ≥99% by HPLC  |
| Solubility                  | Soluble in water ( $\geq 1 \text{ mg/mL}$ )   |
| $\lambda_{ex} \lambda_{em}$ | 350nm\460nm   |
| 3                           | 2,800   |
| STORAGE AND<br>HANDLING:    | Store at 4 °C. Protect material from light, especially in solution  |
| APPLICATION:                | MQAE is an improved chloride indicator that has greater sensitivity to chloride $(K_{sv}=200 \text{ M}^{-1})$ than SPQ $(K_{sv}=118 \text{ M}^{-1})$ and higher fluorescence quantum yield. The ester group of MQAE may slowly dydrolyze inside cells, resulting in a change in its fluorescence response.  |
|                             | Ref: 1) Am J Physiol 259, C375 (1990); 2) Anal Biochem 178, 355 (1989); 3) Anal Biochem 241, 51(1996)   |
| ΤΟΧΙΟΙΤΥ:                   | Unknown.  |
| FIRST AID:                  | Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately. |
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