Isothiazolinones

CAS No. 26172-55-4, 2682-20-4

Molecular Weight: 115.16

Structural Formula:

$$HC \xrightarrow{4} {}^{3}C = O$$
 $HC \xrightarrow{5} {}_{2}N - CH_{3}$

$$\begin{array}{c|c} HC & C \longrightarrow O \\ & & & \\ CI \longrightarrow C & 5 & 2 & N \longrightarrow CH_3 \\ & & & & \\ & & & & \\ \end{array}$$

2-methyl-4-thiazoline-3-ketone(MI)

5-chloro- methyl-4-thiazoline-3-ketone(CMI)

Properties:

Isothiazolinones is composed of 5-chloro-2-methyl-4-thiazoline-3-ketone (CMI) and 2-methyl-4-thiazoline-3-ketone (MI). The bactericidal effect of Isothiazolinones is carried out through breaking the bond between bacteria and algae protein. When contacted with microbes, Isothiazolinones can quickly inhibit their growth, thus leading to death of these microbes. Isothiazolinones has strong inhibition and biocidal effects on ordinary bacteria, fungi and alga, and has many advantages such as high biocidal efficiency, good degradation, no residual, safety in operation, good compatibleness, good stabilization, low cost in operation.

Isothiazolinones can mix with chlorine and most cation, anion, and non-ionic surfactants. When used at high dosage, its biosludge stripping effect is excellent.

Isothiazolinones is a kind of fungicidal with properties of broad spectrum, high efficiency, low toxicity and non-oxidative, it is the ideal biocidal in industrial circulating cool water system and in wastewater treatment in oilfield, papermaking, pesticide, cutting oil, leather, detergent and cosmetics etc..

Specification:

Notes: 2%, 4% and 8% or any concentration can be supplied on demands.

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	Grade I	Grade II
Appearance	Amber transparent liquid	Light yellow or light green transparent liquid
Active content %	14.0min	1.50min
pH (as it)	1.0-4.0	2.0-5.0
Density (20°C) g/cm ³	1.25min	1.02min
CMI/MI (wt %)	2.5-4.0	2.5-4.0

Usage:

When used as sludge stripper for grade II, the dosage of 150-300mg/L is preferred, when used as boicide, the dosage of 80-100mg/L is preferred, and charges every 3-7 days. No used together with oxidative fungicidal such as chlorine, and no used in cooling water system containing sulfur. When used together with quaternary amine, the effect will be better. When used as industrial fungicide, the dosage of 0.05-0.4% is preferred.

Package and Storage:

25kg in plastic barrel, or confirmed by clients. Storage for ten months in room shady and dry place.

Safety Protection:

Corrosive, Avoid contact with eye and skin, Wear splash resistant safety goggles and rubber glores.once contacted, flush with water.