For Marine Microalgae

Daigo's IMK Medium

Wako code・packaging 398-01333 (100L×10)
392-01331 (1000L)

Daigo's IMK medium is a medium for the marine microalgae that "Marine biotechnology technology Institute Co., Ltd." developed to make the medium assumed to be able surely to culture a large microalgae efficiently as a lot as possible handily.
All the element materials are mixed so that making the medium is possible only by melting in seawater. It is possible to use widely from the separation of microalgae in the environment to large-scale culture*, and it is designed as a convenient medium for the culture of the fodder algae for the seedlings production in the marine microalgae culture, the physiological study, and the fishing industry etc.

※ Please add Na_2SiO_3 (0.2～1mM) to the high-density cultures of diatoms separately.

【Formula】 (mg／L)

$NaNO_3$	200	$CoSO_4・7H_2O$	0.014
Na_2HPO_4	1.4	$Na_2MoO_4・2H_2O$	0.0073
K_2HPO_4	5	$CuSO_4・5H_2O$	0.0025
NH_4Cl	2.68	H_2SeO_3	0.0017
Fe-EDTA	5.2	Thiamin-HCl	0.2
Mn-EDTA	0.332	Biotin	0.0015
Na_2-EDTA	37.2	Vitamin $B1_2$	0.0015
$ZnSO_4・7H_2O$	0.023	$MnCl_2・4H_2O$	0.18

【Method of preparation】

Daigo's IMK medium : It dissolves in addition while stirring this medium 25.2g(252g) to seawater 100L(1000L).

※ : When the pH adjustment is needed, the hydrochloric acid or the sodium hydroxide is used. When the pH inclines at the alkali side, white precipitation might be caused.

※ : When the large-scale culture and the high-density culture are done by using daigo's IMK medium, the amount of powdery addition to 1L can be increased.

※ : Please dissolve the daigo's IMK medium after dissolving daigo's artificial seawater SP without fail in the place where the daigo's IMK medium is dissolved to daigo's artificial seawater SP.

1) About sterilization

●As for the medium not sterilized, microalgae in seawater or in the air might mix while making the medium, and microalgae be generated in the cool dark place.

●When the medium is sterilized, the filtration sterilization is done by using the membrane filter in consideration of the vitamin demand to be cultured because the vitamin group has been mixed with daigo's IMK medium. Keep at 4℃, and use it as soon as possible after it sterilizes it.

2) Preparation of agar medium

Daigo's IMK medium 252mg is added to daigo's artificial seawater SP (seawater)800mL, it dissolves, and after it sterilizes it, the medium is kept about 50℃.

Separately, the agar 15g is added to distilled water 200mL and autoclaved for 15 minutes at 121℃. After shaking, it leaves it at the room temperature. It mixes with about 50℃ the sterilized medium and add to the Petri dishes. After it solidifies, it keeps it in the cool dark place.

【Precautions】

As it is hygroscopic, it should be tightly sealed. Store at room temperature.