

Sea Dye Marker

The sea dye marker is a life saving item of Indian Air Force which is used to locate and rescue the air crew and other search vehicles during emergency. The components of sea dye marker are fluorescent green dye, which spreads over water surface and creates a fluorescent green colour when it comes in contact with water. The dye when dissolved in a liquid medium like sea water will fluoresce brilliantly to give a green colour, when illuminated with sun light or any other form of light of the appropriate wavelength in the range of visible light. The bright fluorescent green colour increases the likelihood of being identified during day times and enhances the chances of rescuing a pilot or any other crew landed in the sea during an emergency. Presently, Indian Air Force is importing the sea dye marker and the supply is limited due to a single source of supplier. Accordingly, Food Engineering and Packaging Technology division undertook the indigenous development of sea dye marker. Fluorescent dye, which is a critical component of sea dye marker is screened and finalized the chemical. Various packaging materials were screened and evaluated for the suitability to pack the sea dye marker and Polyurethane (PU) coated fabric was used finalized. Fluorescein Sodium salt is filled in cotton fabric and stitched in all four sides. The Fluorescein Sodium salt packet is packed again in Polyurethane (PU) coated fabric and sealed as per the approved specifications.

