Phosphorescent Sands

COLORIVER

Hydraulic and fluid mechanical tests

USAGE

The phosphorescent sands developed by the SNL are intended for identification under ultraviolet lamp

They are specially designed to be usable in pond water or river water and remain phosphorescent for several years.

The sands were tested by a laboratory to ensure the safety of the sands in water without consequences for aquatic environments.

The most frequent uses are:

- Monitoring of the consequences of floods and dam releases in rivers: this method was developed by researchers from Electricité de France to identify the presence of sand deposited upstream in samples taken at different distances and times*

*Learning center / article published by Remi Loire, Loïc Grosprêtre, Jean-René Malavoi, Olivier Ortiz and Hervé Piégay on an adaptive method using phosphorescent sand to qualify the water release level to move sediments deposited downstream of a dam.

- Hydraulic study in a basin (swell, flow, flow around bridge pillars)
- Avalanche studies
- Studies in fluid mechanics

The use of phosphorescent sand can allow using photos, videos and IA to track movements in fluid mechanics, facilitate modelling or confirm mathematical models

TECHNICAL CHARACTERISTICS

The sand is imperatively natural siliceous with a silica content higher than 98%.

The constituent grains of these sands are uncrushed and rounded in shape.

The SNL has developed two methods to colour sands (paint or ink) according to their grain size.

CONTROLS

The sand is controlled under a UV lamp