

DISPERSION METHOD AND DISPERSING APPARATUS USING
SUPERCRITICAL STATE

ABSTRACT

A dispersion method for uniformly dispersing solid or liquid fine particles in a solvent by utilizing a supercritical fluid, and a dispersing apparatus thereof. A dispersoid of a solid, a liquid or the like is mixed with a solvent, and this mixture is fed to a supercritical vessel. A supercritical solvent is then fed to the supercritical vessel. This supercritical solvent is heated and compressed to a level of higher than the critical temperature and the critical pressure to convert it to a supercritical fluid. Then, the mixture and the supercritical fluid are stirred and mixed. The obtained supercritical mixture is released to atmospheric pressure in an explosion-crashing tank. By such an operation, the dispersoid is efficiently dispersed in the solvent.

Figure 1