

The invention relates to thermally expandable thermoplastic microspheres comprising a polymer shell made from ethylenically unsaturated monomers encapsulating a propellant, said ethylenically unsaturated monomers comprising from 40 to 70 wt% of acrylonitrile, from 5 to 40 wt% of methacrylonitrile, from 10 to 50 wt% of monomers selected from the group consisting of esters of acrylic acid, esters of methacrylic acid and mixtures thereof, and said propellant comprising at least one of methane, ethane, propane, isobutane, n-butane and neo-pentane. The invention further relates to the production and use of the microspheres.