CLAIMS

1. A mixing device (1) comprising at least one first feed opening (2) for at least one first liquid plastic component – preferably loaded with a gas – and at least one second feed opening (3) for at least one second liquid plastic component, and a discharge opening (4) for discharge of a mixture which can be produced in the mixing device (1) and comprising the first and the second liquid plastic components, wherein the mixing device (1) has a rotating agitator (7) for mixing the first and the second liquid plastic components, wherein a gap (6) remains between the agitator (7) and the discharge opening (4), wherein there is provided an adjusting device (5) which either alters the gap (6) by a relative movement between the discharge opening (4) and the agitator (7) or the size of the discharge opening (4), and that there is provided a regulating device (14) which is in signal-conducting relationship with a sensor (17) for determining a pressure prevailing in the mixing device (1), wherein the regulating device (14) sets the gap (6) or the size of the discharge opening (4) by way of the adjusting device (5) in such a way that the pressure prevailing in the mixing device (1) is at a predetermined value, characterized in that for adjusting the gap (6) between the agitator (7) and the discharge opening (4) a screw sleeve arranged concentrically with respect to a shaft (16) of the agitator (7) is axially adjustable by the adjusting device (5) whereby height adjustment of the agitator (7) is effected.

2. A mixing device as set forth in claim 1 wherein the agitator (7) is adapted to be displaceable relative to the discharge opening (4).

3. A mixing device as set forth in claim 2 wherein the adjusting device (5) is connected to the agitator (7), wherein the agitator (7) is moveable relative to the discharge opening (4) by the adjusting device (5).

4. A mixing device as set forth in at least one of the preceding claims wherein the adjusting device (5) includes a linear motor which is preferably arranged at a shaft (16) of the agitator (7).

5. A mixing device as set forth in claim 1 wherein the discharge opening (4) is adapted to be variable in size.

6. A mixing device as set forth in claim 5 wherein the adjusting device (5) is connected to the discharge opening (4), wherein the size of the discharge opening (4) is variable by the adjusting device (5).

7. A mixing device as set forth in at least one of the preceding claims wherein the mixing device (1) is of an elongated configuration and the at least one feed opening (2) for the at least one first liquid plastic component and the at least one further feed opening (3) for the at least one second liquid plastic component are arranged at different axial positions of the mixing device (1).

8. A mixing device as set forth in at least one of the preceding claims wherein the discharge opening (4) of the mixing device (1) is connected to a nozzle (9).

9. A mixing device as set forth in at least one of the preceding claims wherein the predetermined value for the pressure prevailing in the mixing device (1) is less than 20 bars, preferably less than 10 bars, particularly preferably between about 2 and about 4 bars.

10. An arrangement comprising a mixing device (1) as set forth in at least one of the preceding claims, and

- a source (10) for the at least one first liquid plastic component, that is connected to the at least one feed opening (2) for the at least one first liquid plastic component, wherein preferably the at least one first liquid plastic component is mixed with a gas, and

- a source (11) for the at least one second liquid plastic component, that is connected to the at least one further feed opening (3) for the at least one second liquid plastic component, wherein preferably the at least one second liquid plastic component is mixed with a gas.