What is Claimed Is:

1. A process for preparing a compounded polyamide, comprising introducing a molten polyamide feedstock directly to one or more polymer compounding devices, where the molten feedstock is prepared by a polymerization process.

2. The process according to claim 1, wherein the polymerization process is a continuous process.

3. The process according to claim 1, wherein the polymerization process is a batch process.

4. The process according to claim 1, wherein the molten polyamide feedstock is a molten nylon66 feedstock.

5. The process according to claim 1, wherein the polymer compounding device is an extruder.

6. The process according to claim 5, wherein the extruder is a twin-screw extruder.

7. The process according to claim 6, wherein the twin-screw extruder contains at least 2 vent ports.

8. The process according to claim 6, wherein the twin-screw extruder contains at least 3 vent ports.

9. The process according to claim 7, wherein the vent ports are at atmospheric pressure.

10. The process according to claim 7, wherein the vent ports are subjected to vacuum conditions.

11. The process according to claim 6, wherein the twin-screw extruder has a length to diameter ratio of the screw shaft in the range of 24:1 to 56:1.

12. The process according to claim 6, wherein the twin-screw extruder has a length to diameter ratio of the screw shaft in the range of 36:1 to 48:1.

13. The process according to claim 1, wherein only a portion of the molten feedstock is sent directly to the one or more polymer compounding devices.

14. The process according to claim 1, further comprising introducing one or more additives, fillers, reinforcing agents and modifiers into the one or more polymer compounding devices.

15. The process according to claim 1, wherein the polymer polymerization process occurs less than 50 feet from the one or more polymer compounding devices.

16. The process according to claim 1, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 3 units.

17. The process according to claim 16, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 2 units.

18. The process according to claim 1, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 1 unit.

19. A compounded polyamide prepared by the process of claim 1, claim 2 or claim 3.

20. A compounded polyamide having a plate-out value of less than about 2.0 mg/1,000 shots.

21. The compounded polyamide according to claim 20, having a plate-out value of less than about 1.0 mg/1,000 shots.

22. The compounded polyamide of claim 20 or claim 21, having a relative viscosity (RV) range between samples of less than about 2 units.

23. The compounded polyamide of claim 20 or claim 21, having a relative viscosity (RV) range between samples of less than about 1 unit.

24. The compounded polyamide according to claim 20 exhibiting greater than about 500 shots before detection of burn material in a mold for mold injection.

25. The compounded polyamide according to claim 20 exhibiting greater than about 600 shots before detection of burn material in a mold for mold injection.

26. The compounded polyamide according to claim 21 exhibiting greater than about 500 shots before detection of burn material in a mold for mold injection.

27. The compounded polyamide according to claim 21 exhibiting greater than about 600 shots before detection of burn material in a mold for mold injection.

28. The compounded polyamide according to any one of claims 19 to 27, wherein the polyamide is nylon66.

What is Claimed Is:

1. A process for preparing a compounded polyamide, comprising introducing a molten polyamide feedstock directly to one or more polymer compounding devices, where the molten feedstock is prepared by a polymerization process.

2. The process according to claim 1, wherein the polymerization process is a continuous process.

3. The process according to claim 1, wherein the polymerization process is a batch process.

4. The process according to claim 1, wherein the molten polyamide feedstock is a molten nylon66 feedstock.

5. The process according to claim 1, wherein the polymer compounding device is an extruder.

6. The process according to claim 5, wherein the extruder is a twin-screw extruder.

7. The process according to claim 6, wherein the twin-screw extruder contains at least 2 vent ports.

8. The process according to claim 6, wherein the twin-screw extruder contains at least 3 vent ports.

9. The process according to claim 7, wherein the vent ports are at atmospheric pressure.

10. The process according to claim 7, wherein the vent ports are subjected to vacuum conditions.

11. The process according to claim 6, wherein the twin-screw extruder has a length to diameter ratio of the screw shaft in the range of 24:1 to 56:1.

12. The process according to claim 6, wherein the twin-screw extruder has a length to diameter ratio of the screw shaft in the range of 36:1 to 48:1.

13. The process according to claim 1, wherein only a portion of the molten feedstock is sent directly to the one or more polymer compounding devices.

14. The process according to claim 1, further comprising introducing one or more additives, fillers, reinforcing agents and modifiers into the one or more polymer compounding devices.

15. The process according to claim 1, wherein the polymer polymerization process occurs less than 50 feet from the one or more polymer compounding devices.

16. The process according to claim 1, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 3 units.

17. The process according to claim 16, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 2 units.

18. The process according to claim 1, wherein the compounded polyamide has a relative viscosity (RV) range between samples of less than about 1 unit.

19. A compounded polyamide prepared by the process of claim 1, claim 2 or claim 3.

20. A compounded polyamide having a plate-out value of less than about 2.0 mg/1,000 shots.

21. The compounded polyamide according to claim 20, having a plate-out value of less than about 1.0 mg/1,000 shots.

22. The compounded polyamide of claim 20 or claim 21, having a relative viscosity (RV) range between samples of less than about 2 units.

23. The compounded polyamide according to claim 20 exhibiting greater than about 500 shots before detection of burn material in a mold for mold injection.

24. The compounded polyamide according to claim 21 exhibiting greater than about 500 shots before detection of burn material in a mold for mold injection.

25. The compounded polyamide according to any one of claims 19 to 24, wherein the polyamide is nylon66.