

	<h1>Buntrock Industries, Inc.</h1> <p>Investment Casting Supplies</p>	Document#: 7.37
		Rev#: 0
	Title: Mixing Ti Bond A and Ti Bond B	Page#: 1 of 2

Rev	Description of Change	Author	Date
0	Initial Release	Joe Norvell	9/17/14

1.0 Scope:

1.1 This procedure describes the method for making Ti Bond A and also Ti Bond B.

2.0 Purpose:

2.1 This procedure is used to make Ti Bond A and an equivalent weight of Ti Bond B using the formulas located in the Binder Formulas/Ti Bond A and B folder. The file is named Ti Bond A and B Formulas.

3.0 Hazard and Safety:

3.1 Consult the Material Safety Data Sheet (MSDS) for required handling procedures and Personal Protective Equipment (PPE) required.

4.0 Equipment:

4.1 Mixer. The stand mixer with the boards attached to it fits in the large open bucket well.

4.2 Something to mix in. There are two open drums for this. A large one that will fit 55 gallons and a smaller one that will hold 15 gallons maximum.

4.3 A scale to measure ingredients.

4.4 Something to put the Ti Bond A and B in after it is made.

4.5 A transfer pump.

4.6 A bucket for transferring polymer.

4.7 The following ingredients:

Distilled or deionized water

Idisil IC 0830

Selvol PVA 08-125

Curesan 200

Antifoam 2004

Kathon Biocide LX 1.5% (low pH)

Stepanquat 200 Biocide (high pH)

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5.0 Procedure:

- 5.1 For **Ti Bond A** add an appropriate amount of distilled water to a mixing container.
- 5.2 Start the mixer and add the Antifoam 2004. Be careful not to turn the mixer so high that a vortex forms and air is pulled in.
- 5.3 Over a period of about five minutes, slowly add the Selvol PVA 08-125 to the water.
- 5.4 Add the Kathon Biocide LX 1.5%.
- 5.5 After mixing for 15 minutes, take a sample and test it for pH, specific gravity and viscosity with a #2 Zahn Signature Cup.
- 5.6 Transfer the mixed Ti Bond A into containers.
- 5.7 For **Ti Bond B** add an appropriate amount of Idisil IC 0830 to a mixing container using the transfer pump.
- 5.8 Start the mixer and add the distilled water. Be careful not to turn the mixer so high that a vortex forms and air is pulled in.
- 5.9 Add the Curesan 200.
- 5.10 Add the Stepanquat 200 Biocide.
- 5.11 After mixing for 5 minutes, take a sample and test it for pH, specific gravity and viscosity with a #2 Zahn.
- 5.12 Transfer the mixed Ti Bond B into containers.

6.0 References:

- 6.1 None.