

	<h1>Buntrock Industries, Inc.</h1> <p>Investment Casting Supplies</p>	Document#: 7.15
		Rev#: 0
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Rev	Description of Change	Author	Date
0	Initial Release	Tim George	1/12/14

#### 1.0 Scope:

- 1.1 This procedure describes a method for detecting the presence of microbial growth within water-based slurries.

#### 2.0 Purpose:

- 2.1 This is an easy test to monitor the presence/absence of harmful bacteria growth, which can degrade the stability of slurries. Unusual or unpleasant odors are also evidence of bacteria growth.

#### 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 Culture slide, such as MCE Combi dip slide or equivalent.
- 4.2 Eye dropper (optional).
- 4.3 50 ml tubes.
- 4.4 50 ml beaker or vial.
- 4.5 Biocides.

#### 5.0 Procedure:

- 5.1 Obtain sample of binder extracted from slurry per section 7.13.
- 5.2 Unscrew the cap and withdraw the cap and slide from the vial. Be careful not to touch the agar coated surface of the slide.
- 5.3 Cover the agar surface of the slide with test binder by either dipping it into the binder for a minimum of three seconds or by using an eye dropper.
- 5.4 Allow excess fluid to drain from the slide.
- 5.5 Screw the cap back on lightly and then back it off one half turn. Incubate the vial in an upright position at 77° to 86° F (25° to 30° C) for 24 to 48 hours.
- 5.6 Compare the results against the Colony Density Chart provided by the manufacturer of the slide.

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5.7 Be sure to keep accurate records, in chronological order, for each slurry.

6.0 Results:

6.1 If bacteria growth is detected, contact supplier for recommendations to eliminate bacteria, including use of biocides.

6.2 Finding the cause of contamination must be done to prevent reoccurrence of the problem.  
Check any container that may have either direct or indirect contact with the slurry.

7.0 References:

7.1 None.