### TERMS YOU SHOULD KNOW

#### 1. BIOMASS

Broadly it is any biological material derived from living or recently living organisms. In brewing, specifically, we are dealing with the leftover gunk, trub or slag that results from the brewing process. Each stage produces different biomass; caramelized and carbonized sugars, latent hops, spices, spent yeast cake, residual beer, and krausen are some examples of biomass you'll encounter.

#### 2. MICRO-ORGANISMS

A diverse set of single or multicellular organisms not visible to the naked human eye. The group includes bacteria, archaea, protozoa, protists, algae, fungi, and even some animals. We are most commonly concerned with anything feeding on latent soils and then anything living on the inner surface of your fermenter or packaging. Anything in this category is a threat to your beer's purity and justifiably marked for death.

#### 3. CALCIUM OXALATE

A naturally occurring insoluble brewing salt that derives from combining the oxalates naturally found in plants (especially hops) and Calcium from water or mineral addition to water used in the malting or brewing process. Calcium oxalate is a contributor to beer stone formation ... and that's bad.

#### 4. CALCIUM CARBONATE

An insoluble salt, generally known as hard water scale that requires an acid rinse to remove. Calcium carbonate can be a nuisance when cleaning with oxygen based percarbonate cleaners. After releasing the oxygen in

solution, a carbonate chain will react with calcium in the water leaving a deposit. Proper formulation sequesters calcium in a soluble form before it can react with the carbonate.

# IT'S NOT WORTH THE RISK

# Your beer and your reputation are on the line.

You can select the choicest hops, the most exotic yeasts and invest in all the state-of-the-art equipment you can find. Without the right chemicals and the right cleaning techniques, micro-organisms will find a way to wreck your batch.

That's where we come in.

CRAFT MEISTER IS WHAT COMES BETWEEN YOU AND A BAD BATCH.

# GOT A QUESTION ABOUT CHEMISTRY?

# Ask an expert.

Making beer is a complex art form... there's some very serious science involved. That's actually the part we love the most. If you have a chemistry-based question we'd love to help. Drop us an email at EXPERTS@CRAFTMEISTER.COM and we'll help any way we can. We love tough questions but we hate skunky beer.





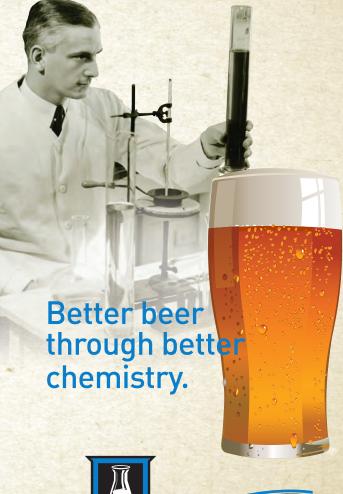
FIND US ON FACEBOOK: CRAFTMEISTERBREWWASH

#### CRAFTMEISTER.COM

PO BOX 32 WINONA, MN 55987 800-533-0027

© 2014 Craft Meister – A Division of National Chemicals, Inc – All Rights Reserved







CRAFTMEISTER.COM

# SAY GOODBYE TO BAD BATCHES

Craft Meister has been working with beverage industry giants as well as professional brewers for nearly seven decades. We're obsessive about what we do. With the right chemistry and right habits we can help make sure you never lose perfectly good beer to bad micro-organisms. For starters, here are a few things you have to understand.

# 1. There are things you can see, and things you can't.

The brewing process inherently creates an assortment of gunk, films and solids. As a group we refer to them as biomass and they're pretty easy to see. Our Brewery Wash products break that junk down. That brings us to the micro-organisms of the world ... and that's another story.

### 2. What you can't see can hurt you.

Here's the thing about micro-organisms like pediococcus and lactobacillus...they're invisible and they're virtually everywhere. That's why it's important to use BTF lodophor ... it kicks micro-organisms to the curb, leaves no taste behind and doesn't require rinsing. It's like an insurance policy for your beer and it literally costs you pennies per batch.

# 3. You need to get your routine down pat.

Good habits and good chemistry are
the key to avoiding a bad batch. Try
standardizing your process as much
as possible. Create a repeatable
way of doing things and stick to
it. Admittedly, we have a touch of
obsessive compulsiveness, so
it just comes naturally. You
might have to work at it.

# Two steps. No Mystery.

The world of homebrew undesirables breaks into two groups; THINGS YOU SEE AND THINGS YOU DON'T. Craft Meister makes products for both. Our BREWERY WASH PRODUCTS break down solids and make the gunk fall away from your equipment and BTF lodophor wipes out the invisible army of micro-organisms just waiting for the opportunity to bust your batch. With the right chemistry on your side, they don't stand a chance.

## ALKALINE BREWERY WASH

Quickly breaks down the toughest soils but will not burn your skin or damage stainless steel, plastic, or glass. Reduces calcium carbonate and oxalate



residues that oxygen cleaners leave behind. Powder dissolves quickly in hot or cold water and works in all water conditions. Removes labels from bottles in minutes! Not for use on aluminum.

- Cleans brew kettles, corny kegs, fermentors, fittings, tubing and bottles
- > Use on glass, plastic and stainless steel
- > Works in hot or cold water and rinses freely
- > No chalky build-up

#### OXYGEN BREWERY WASH

Don't waste time soaking and scrubbing! Fast-acting oxygen tears up soils in just minutes with little agitation needed. Formulated to combat calcium carbonate. Rinses clean with no residue left behind. Easily removes bottle labels. Powder dissolves quickly and works in all water conditions.



- Cleans brew kettles, corny kegs, fermentors, fittings, tubing and bottles
- > Quick dissolving powder
- > Rinses clean no chalky residue

#### **BTF IODOPHOR SANITIZER**

Odorless and tasteless sanitizer is safe to use on all your brewing equipment: carboys, buckets, tanks, vats, bottles and more. Low-foaming formula is superior to other brands of lodophor for brewing. No-rinse concentrate requires only 1 tsp per 1 1/2 gallons and 2 minutes of contact time to be effective.

- > For professional or home brewing and wine making
- Low foaming, no rinse sanitizer
- No residual taste or odor left behind
- Gentle on hands
- OMRI listed for Organic Use

# no rinse sanitize ste or odor left b ls Organic Use

# CRAFT MEISTER GROWLER TABLETS

Fast-acting tablet fits easily through the narrow neck to clean growlers — no brushing or agitation needed! Fill Growler with warm water, add tablet and watch as soils break down in just minutes.



# CRAFT MEISTER KEG & CARBOY TABLETS

Pre-measured tablets take the guess work out of cleaning your home brewing equipment! Simply fill your keg or carboy with hot water, add the tablets and let them go to work.





