



### **What is Bitrex® ?**

Well, the question really is "What is Bitrex Safety Technology?"

From the initial accidental discovery of Bitrex in 1958 during routine experiments on the Novocaine molecule we found the The Bitterest Stuff On Earth. It's in the Guinness book of Records. This led us to become experts in science of bitter sensory perception, which led us to be leaders in product safety for Consumer Packaged Goods - both in the bitter science and in safety communications.

Bitrex is in thousands of products as a "Branded Ingredient". Go look at a bottle of nail polish remover in your bathroom. Our logo is on the back. We actually did human taste tests- clinical trials - on over 15 variations of that product. All the different formulas, scents, colors, viscosities. And only after they pass those trials do we allow the Bitrex logo on the product.

Other products that Bitrex helps protect include laundry detergent packets, the Nintendo Switch, antifreeze, toys, cleaners, cosmetics, toiletries, batteries, nail biting deterrents and hundreds of other products. Through the Bitrex Certification Program, Bitrex has been human taste tested in over 5700 products!

Market Actives is the exclusive US Distributor and for 26 years we have helped brands to help protect against unintended ingestion or product misuse. Bitrex helps CPG brand's tell their Product Safety Story with a compelling safety messaging. We help brands engage in safety measures with regulators, the trade and consumers. Bitrex captivates people in positive solution-oriented conversations on safety.

Bitrex is a powerful story; it's emotional and it builds trust.

### **Bitrex as a Denaturant**

Since 1960, Bitrex has been used as an alcohol denaturant. In non-liquor ethanol production Bitrex is used as a "denaturant" to stop diversion of ethanol into the highly taxed liquor market. Denatured alcohol is not taxed, and Bitrex is there to protect that tax revenue. Undenatured ethanol is taxed at up to \$27.00 per gallon in the USA, and at similar rates around the world.

The formula TTB requires is called Specially Denatured Alcohol 40B (yes, the “B” is for Bitrex) or for short “SDA-40B”. The law on this formula is found in the Code of Federal Regulations at 27 CFR 21.76. The FDA approved use of Bitrex as an alcohol denaturant for alcohol used in a wide range of cosmetics, toiletries and personal care products, along with use as a pharmaceutical excipient, which includes the ethanol for OTC drug Hand Sanitizer.

### **Working with Bitrex and Market Actives**

Bitrex is extremely bitter but given our extensive experience with this product we are able to provide guidance in handling this unique chemical. We are readily available by phone and email to answer questions. We have more information on our website, [www.BitrexUSA.com](http://www.BitrexUSA.com) or you can call our office at 503-244-0166.

### **Additional Information**

- What forms do you sell it in that would be appropriate for a distiller making hand sanitizer (liquid, powder, etc)?  
Bitrex is available in the pure anhydrous form or pre-dissolved solutions. Also, to help make it easier to know how to add this to your products, we have put together a treat rate chart that we provide with each order.
- What is the typical shipping time?  
We have material in stock and ship the same day. There are no restrictions on shipping so we are able to ship as fast as overnight.
- What is the cost range?  
The material costs vary depending on volume, but as an example of a common pack size used for many distillers, we have a 250ml bottle for \$79/ea that will treat 3540 gallons of Ethanol under the SDA 40B formula guidelines.
- How can a distiller order it?  
Orders can be place by calling our office between 8a-5p M-F or by send a query through out website [BitrexUSA.com](http://BitrexUSA.com).
- Any tips or notes of caution for handling it?  
Bitrex is EXTREMELY bitter. And in handling it you will likely taste it. Please alert all employees about the bitter taste before they experiences it. We remind people that will be working with this that Bitrex is used in thumb-sucking deterrents. Chocolate will help cut the taste. And we have a handling recommendations document that we provide with all orders.

- Do you have other beverage manufacturers who have been using Bitrex?

We have been working with hundreds of food and beverage companies using Bitrex around the world. From small distilleries to massive mouthwash companies to soup companies converting to hand sanitizer; we are there to help make sure Bitrex does not interfere with your normal product production.

- And have they had any problem cleaning it out of their systems?

The level of Bitrex in SDA-40B ethanol is 6 PPM. So a simple water rinsing will dilute it down to parts per "gazillion" pretty quickly which is essentially undetectable and would have no effect on future materials in the system. But you can use a strong oxidizer will destroy Bitrex is you want to be extra sure. I have spoken with a number of distillers who are planning on using a 3% hydrogen peroxide solution which will also breakdown the bitter compound like bleach. Some people have a caustic cleaning agent they already use that from their description sounds like it will also do the job.