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To: Kathy Wille and Russ Robers
C2R Global Manufacturing Inc. | Rx Destroyer™

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From: Henry Nowicki, Ph.D.

Report: April 29, 2015

Sample ID: EE-541

Subject: Provide analysis of Rx Destroyer drug capacity per bottle size to support claims of DEA non-retrievable standard.

| <u>Rx Destroyer Bottle Sizes</u> | <u>Pore Volume cc by Bottle Size for Drugs Adsorption</u> | <u>Number of Pills with 5 mg Drug</u> | <u>Pore Volume Required Complete Adsorption cc</u> |
|--------------------------------------|---|---|--|
| Rx 4 | 12.75 | 50 | 0.25 |
| Rx 16 | 30.58 | 300 | 1.5 |
| Rx 64 | 112.14 | 1500 | 7.5 |
| Rx 2.5 | 560.51 | 7500 | 37.5 |

Characterization of the activated carbon used in the Rx Destroyer product line is attached - GAED Aqueous full characterization of EE-541. This data was used to provide the above adsorption space or pore volumes for drug physical adsorption capacities in Rx Destroyer bottle sizes. Each Rx Destroyer bottle is designed to have a safety margin, i.e., excess adsorption pore volume space still available after the unit has been applied as described on web site. My conclusion is that each bottle size has enough capacity to cover claims, and have an ample safety margin.

Adsorptive pore volume is the space available in each Rx Destroyer product that will take up drugs from water. This space is defined as the wall to wall nanometer 2 or less. These nano-spaces provide the force to bring the molecules into the condensed state from the liquid and pack them tightly together.

Capacity issue, for example in the Rx 64, there is 112.14 cc adsorption space or pore volume for drug adsorption. If 1500 pills with 5 mg or 30 mg active drug per pill then we challenge the carbon pore volume with: 7.5- or, 45-grams of active drug. Drugs of interest have a packed condensed density more than 1.0 g per cc, a conservative value. Thus, to satisfy the two 5- and 30-milligram pills example we need 7.5-, 45- cc of pore volume for complete adsorption. Since we have 112.14 cc of workable pore volume, we have an excess available pore volume of 67 cc at the highest example of active drug in each pill, using conservative drug packed density.

Rx Destroyer bottles are designed to get complete adsorption of targeted drugs by providing ample carbon adsorption space in each sized bottle.

Even with the present safety margin in excess pore volume C2R Global Mfg Inc. is considering other carbons which could provide 20-25% increase in pore volume, without increasing the carbon volume.

Once drugs are carbon adsorbed there is no way to recover them for abuse. Consuming the carbon particles with bound drugs would pass through the gastro-intestinal tract. Carbon products are available to administer by mouth to drug abusers, like a child's accidental consumption. The carbon binds and holds the GI drugs for normal waste disposal. Some Asian countries use carbon tablets in patients to remove metabolic toxic compounds from kidney/liver. Existing literature reveals that drugs are very well adsorbed by activated carbons.

Used carbon in small amounts are disposed thru normal solid waste handling procedures. Amounts of activated carbon in Rx Destroyer bottles are considered small. The EPA basis for this small amount of used carbon disposal is based on passing the TCLP test. Toxicity Characteristic Leaching Procedure (TCLP) test provides confidence that carbon adsorbates will not leach off to contaminate ground water. Your Brita or Pur water purifier at home contains carbon. It is acceptable to dispose of used carbon cartridges in normal solid waste. Bert McCarty has published work showing drug spent activated carbons pass TCLP test. Carbon is well known to hold adsorbates tightly and not leach off by water.

Perhaps the most often heard complaint from carbon users is that carbon is NOT working, typically the reason is due to improper wetting. Rx Destroyer solves this problem.

The Rx Destroyer™ is designed to provide enough pore volume to provide complete adsorption and thus non-retrievable drugs destruction for practical purposes.

In summary, activated carbon is the best available technology and practical solution to provide control, safe and environmental friendly disposal of pharmaceuticals. This adsorption is accomplished by the nano-sized adsorption spaces or pore volumes provided by activated carbon. Carbon is the best available technology for solving the problem - control for un-used pharmaceutical wastes.

Rx Destroyer bottles are designed to get complete adsorption of targeted drugs by providing ample carbon adsorption space or pore volume in each sized container. The opening table of data clearly demonstrates a wide safety margin is available to handle claims and provide some variance by the product users.

My answer relies on my 30+ years of experiences with activated carbon applications and my experience in toxicology.

Regards,

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