

# Xtreme™ RT

## Mitigation Technology for Red Tide & Blue-Green Algae

In an effort to restore impacted waterways that have been plagued by Red Tide and Blue Green Algae outbreaks, Heartland Energy Group, Ltd. is pleased to offer their safe, non-toxic treatment. Xtreme™ RT has been developed is now offered as a safe treatment response to kill the Red Tide and eliminate the toxins created from the Red Tide. These toxins have severely impacted local residents and the tourism industry for decades without any viable resolution. The problems associated with Red Tide and Blue Green Algae outbreaks have been shown to cause massive aquatic and wildlife kills along with the release of harmful toxins and odors that make it virtually impossible to breathe during a bloom event. Xtreme™ RT's ingredients are considered GRAS by the FDA. "GRAS" is an acronym for the phrase Generally Recognized AS Safe under sections 201(s) and 409 of the US Federal Food, Drug, and Cosmetic Act. More importantly, Xtreme™ RT is so safe its' ingredients are US EPA Exempt from registration under the minimal risk pesticide FIFRA section 25(b). Products powered by the Xtreme™ technology have been tested and used on various viruses and bacteria over the past 20 years. Heartland Energy Group has worked side-by-side with major aquatic research institutions like Mote Marine Labs to carefully verify that our technology will not add any harmful side effects to aquatic mesocosms. Our primary goal is to quickly and safely eliminate the harmful strains of k.brevis or cyanobacteria without causing any further damage to the ecosystem that has already occurred.

### FEATURES AND BENEFITS:

- This product is exempt from EPA registration under the minimal risks pesticides exemption FIFRA section 25(b).
- Xtreme™ RT is formulated with all natural ingredients and is considered GRAS by the US FDA. Xtreme™ RT is biodegradable.
- Xtreme™ RT has been shown to inactivate k.brevis bacteria in 4 hours or less and to eliminate the harmful toxins.
- Xtreme™ RT is immediately active when treating k.brevis and cyanobacteria.
- Xtreme™ RT offers complete degradation resulting in the elimination of odors for residents along waterways, boaters, and tourists.
- Xtreme™ RT immediately kills odor causing bacteria.
- Xtreme™ RT effectively controls the growth of harmful algae blooms.

### SUGGESTED DEPLOYMENT METHODS:

Xtreme™ RT can be applied by multiple methods to any body of water impacted by Red Tide or Blue Green Algae (HAB's) including but not limited to:

1. Pump-up hand sprayers & back pack sprayers
2. ATV mounted sprayers or trailer mounted sprayers
3. Boat mounted sprayers or barges
4. Helicopter or crop duster mounted sprayers
5. Aerial or underwater drones
6. Portable water treatment systems

### GEOGRAPHIC AREAS INCLUDE:

Canals, marinas, residential docks, bays, oceans, ponds, & lakes.

### RECOMMENDED APPLICATION & FEED RATES

Application	Step #1	Step # 2	Step #3	
			Red Tide	Blue-Green Algae
<b>Initial Mitigation</b> for the reduction of Red Tide (k.brevis) and Blue Green Algae (cyanobacteria).	Determine the total number of gallons for the impacted body of water.	Determine the severity of the concentration of the k.brevis. Higher cell concentrations may require subsequent dosing.	Apply 25 ppm of Xtreme™ RT (25 milligrams/liter) product for the control of k.brevis (Red Tide) growth.	Apply 15-20 ppm of Xtreme™ RT (15-20 milligrams/liter) product for the control of cyanobacteria (Blue Green Algae).
<b>Subsequent or Secondary Applications</b> to further control the growth of Red Tide (k.brevis) and Blue Green Algae (cyanobacteria).	Determine the total system gallons for the impacted body of water.	Determine the remaining severity and cell concentrations for subsequent dosing.	Apply 25 ppm of Xtreme™ RT (25 milligrams/liter) product for the control of k.brevis (Red Tide) growth.	Apply 10-15 ppm of Xtreme™ RT (10-15 milligrams/liter) for the control of cyanobacteria (Blue Green Algae).

### ADDITIONAL APPLICATION CONSIDERATIONS FOR BEST RESULTS:

- Wind speed and direction should be considered.
- For Red Tide, if possible inject Xtreme™ RT slightly below the surface level (6 inches to 12 inches is optimal).
- For Blue-Green, if possible spray Xtreme™ RT on the surface & repeat based on thickness of the mat.
- Over-all depth of the body of water being treated. It is suggested to apply Xtreme™ RT during high tide if possible to allow the most contact time possible before the material is swept away.

### Xtreme™ RT

**is packaged in 5 gallon to 275 gallon containers.**

**Bulk quantities available upon request.**

Recommendations given in this data sheet are based on tests believed to be reliable. However, the use of the information is beyond the control of Heartland Energy Group, Ltd. and no guarantee, expressed or implied is made to the results obtained if not used in accordance with directions or established safe practice. The buyer must assume all responsibility, including injury or damage from the misuse of the product as such, or in combination with other materials. This bulletin is not to be taken as a license to operate under or recommendation to infringe any patent.

**For More Information Contact: Heartland Energy Group @ 877-797-2811**