



Manufacturer of Industrial Process & Cleaning Chemicals

## Concentration of OW 333 Rust Inhibitor Tank-side Drop Method

Alkalinity Test Kit should contain the following:

- 1 dropping bottle of 3N Hydrochloric Acid
- 1 dropping bottle of Bromocresol Green Indicator (0.04% aqueous)
- 1 10 to 20 ml. Mixing Cylinder with cap

Method:

1. Carefully fill the mixing cylinder to the 10 ml. mark with the use solution of the rust inhibitor.
2. Add 3 drops of the Bromocresol Green Indicator to the cylinder. The solution will become blue.
3. Add Hydrochloric Acid to the cylinder, drop by drop, with agitation (gentle shaking of the cylinder), counting the drops of the Hydrochloric Acid needed to make the solution pale yellow with a white floc.
4. Record this number as the number of drops of 3N Hydrochloric Acid required to neutralize the total alkalinity of the rust inhibitor.
5. Control the system using this total alkalinity endpoint. The number of drops of 3N Hydrochloric Acid relates to the rust inhibitor concentration as follows:

<u>Drops of Acid</u>	<u>% Concentration</u>
3.5	2.0
7.0	4.0
8.5	5.0
10	6.0
12.5	8.0
16	10