



Specifications

RYDLYME Marine dissolves unwanted marine growth, calcium, rust, barnacles and zebra mussels completely, rapidly and safely!

1. Apex Engineering Products Corporation manufactures a liquid descaler called **RYDLYME Marine**, which is specifically designed for marine applications and equipment. **RYDLYME Marine** is biodegradable in its received form without the need for neutralization. **RYDLYME Marine** is also non-hazardous, non-corrosive, non-injurious, and non-toxic. **RYDLYME Marine** is heavily fortified with wetting and penetrating agents which actually dissolves water scale, rust, mussels, barnacles, zebra mussels, tiger shells and other water formed deposits from water operated marine equipment.
2. **RYDLYME Marine** does not corrode, erode, attack, oxidize or have other deleterious effects on virtually any metal or materials found in marine water systems such as:

BRASS	COPPER NICKEL	IRON	STEEL
CARBON	FIBERGLASS	PAINTED SURFACES	TEFLON
CERAMIC	GELCOATS	PLASTICS	TITANIUM
COPPER	GLASS	RUBBER	WOOD

3. The exception to number 2 above, when using 100% concentrated (non-diluted) **RYDLYME Marine** on magnesium, zinc, and/or some alloys of aluminum (i.e. anodes, zincs, etc.), oxidation or pitting will occur. Furthermore, polished chrome and some alloys of stainless steel could become discolored. The rule of thumb is that if the alloy is designed for use in a water system (i.e. aluminum engine block, aluminum mold, etc.), the alloy should be compatible with the **RYDLYME Marine** solution. Otherwise, it is recommended that the **RYDLYME Marine** be diluted 50% or more with water when cleaning. To confirm compatibility, test in small inconspicuous location.
4. Before commencing a cleaning job utilizing **RYDLYME Marine**, all flexible or corrugated stainless steel should be temporarily replaced with rubber or similar hosing.
5. **RYDLYME Marine** has the ability to dissolve approximately 2 pounds / 1 kilo of calcium carbonate scale per gallon of concentrate used.
6. Most **RYDLYME Marine** cleaning applications can be accomplished within an average of two to four hours. When more than a six hour circulation is required, contact the manufacturer for instructions. Please use material only as directed.
7. The solution has the ability to dissolve deposits from some equipment while in operation and without shutdown, if auxiliary coolers are incorporated. Please contact Apex Engineering for further information.
8. **RYDLYME Marine** should be applied at ambient temperatures with no heating required. **RYDLYME Marine** can be used within the operating limits of 0°F / -18°C and 180°F / 82°C. If the solution does freeze, slush or thicken at the lower operating temperatures, and then thaws, there will be no reduction in performance. Please consult the manufacturer when temperatures exceed the aforementioned thresholds.

9. The solution is exothermic, but does not develop a substantial increase in temperature while dissolving water scale, rust, mussels, barnacles, zebra mussels, tiger shells or other water formed deposits.
10. Do not mix **RYDLYME Marine** with strong caustics or any strong oxidizers (hydrogen peroxide, bleach, sodium hypochlorite, etc.).
11. It is recommended, but not mandatory, that the **RYDLYME Marine** solution be thoroughly mixed before using. Some settling of a dark precipitate may occur, resulting in an amber colored liquid, but there are no negative affects upon the performance of the solution.
12. The solution does not deteriorate, oxidize, saponify, thicken or lose effectiveness for at least five years.
13. The concentrated solution can be held safely in the open hand without deleterious effects. It will however cause a mild stinging sensation if contact is made on an open wound or cut. If this occurs, simply rinse thoroughly with soap and water. See SDS for additional information.
14. The solution is of a pleasant or characteristic odor, very similar to almonds, and does not exude any obnoxious or toxic vapors. In rare instances, problematic vapors may occur when encountering high concentrations of sulfur or chlorine. Please contact the manufacturer before proceeding under these circumstances.
15. **RYDLYME Marine** is an electrolyte, as are most cleaning agents. An electrolyte is any liquid that will transfer small electrical currents. Examples: salt water, vinegar, Coca-Cola. An electrolyte may cause plating in some types of equipment. This means a transfer of small amounts of one metal onto another metal according to the galvanic corrosion chart. In some instances, a thin coating of copper may be plated onto a steel drum while circulating an electrolyte such as **RYDLYME Marine**. The only time plating occurs is when two dissimilar metals are in an electrolytic solution.
16. The solution is packaged and shipped in single gallon containers, 4x1 gallon cases, 5-gallon jugs, 30-gallon drums, 55-gallon drums and 330-gallon tote containers.
17. **RYDLYME Marine** is non-reportable under SARA Title 3: Sections 311/312/313 Categorization. **RYDLYME Marine** is non-reportable under CERCLA.
18. **RYDLYME Marine** does NOT contain any toxic creosols or other hazardous substances not listed in our current safety data sheet. **RYDLYME Marine** does not contain any VOC's.
19. The foregoing specifications are applicable to our product, **RYDLYME Marine**, when used according to instructions that are available upon request and in NO WAY are intended to cover other uses or applications by the purchaser.

RYDLYME Marine is biodegradable. In most scenarios **RYDLYME Marine** can be disposed down normal sewers, please check with local ordinances to confirm disposal method.

For additional details regarding the specifications of **RYDLYME Marine**, please contact the technical department at APEX ENGINEERING PRODUCTS CORPORATION at 630-820-8888.