**GREEN LIFE GROUP
 Technical Data Sheet**

**GREEN UP- LR (Lime scale Remover)**

**Description**Lime scale is the hard, off-white, chalky deposit found in kettles, hot-water boilers and the inside of inadequately maintained hot-water central heating systems. It is also often found as a similar deposit on the inner surface of old pipes and other surfaces where "hard water" has evaporated. Other than being unsightly and harder to clean, lime scale seriously impairs the operation or damages various components.
GREEN UP- LR is descaling agent, used to remove lime scale from metal surfaces in contact with hot water, such as in boilers, water heaters, and kettles.  Strongly natural acidic descaling agents GREEN UP- LR  is a natural  preservative/conservative Active water based environmentally friendly , contains no caustic soda, breaks down quickly does not harm humans and the environment**.**  This is one of the products of the Green Up series that is user friendly, readily biodegradable and does not harm the users and the environment.

**Summary of Benefits**

* High level of dissolving scales
* Does not contain dissolving agents which are carbon based
* Composed of material which is user friendly
* Not dangerous for use
* Suitable for use in industrial cooling systems  areas
* Food safe
* Not harm the environment biodegradable
* Non flammable
* Can be diluted with water
* Can be applied in wet areas
* Reduce cooling system failures
* Environmentally friendly
* Money Saved

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**Application**

* Cleaning kitchen equipment
* Cleaning water pipe system
* Cleaning stainless steel surfaces
* Cleaning industrial cooler equipment
* Cleaning motors and cars cooling system
* Cleaning industrial water heating machinery
* Cleaning water filters, pipes and water tanks
* Cleaning all kinds of scales in cooling systems
* Prevents the formation of molds, fungus in water systems

**Directions for Use**

Cleaning lime scale in water boilers - recommended to adding GREEN UP LR in concentration of 10%to the boiler system and make a spin for 5-7 hours. Then pour the water from the heating system and fill clean water. On regular working recommended add of GREEN UP LR at 2% to heating system to prevent scale formation in water.
To clean cooling systems - add at 5 % vol.  GREEN UP- LR performs  as a flushing fluid to clean cooling systems that were filled with other inhibitor packages. In most cases it is required to flush the system twice.  For a good result it is important that the engine has reached normal operating temperatures and all thermo-valves are opened.
GREEN UP- LR  can also be applied as an inhibitor package for central heating systems.
GREEN UP – LR For glass cleaning, a solution with a 10% concentration of GREEN UP-LR will remove hard water stains from glass without scrubbing.

 It is necessary to drain the existing coolant fluid contained in the  coolant system before initially filling  with a 7–10% solution of Green Up  LR in water. Depending on the condition of the system it may be necessary to thoroughly flush the system to remove loose deposits and precipitates.

Flushing is done preferably with a 5% solution of Green Up LR in fresh water. Using Green Up LR for flushing will facilitate the removal of the deposits and provide corrosion protection during and after the flushing operations. For new systems a simple flush will usually be sufficient to remove any cooling fluid and the few deposits present. In older systems, hard water scale, corrosion deposits and precipitates from former water treatment chemicals will not be removed by flushing only. Depending on the nature and amount of the deposits it will be necessary to operate the equipment for some time to allow cleaning of the system by the standard 7–10% solution of **Green Up Cool.**

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**Flushing Procedure for Cooling Systems in New equipment's**
1. Completely drain the system.
2. Fill the system with 5% solution of Green Up LR in fresh water (flushing fluid).
3. Run the equipment in fast idle speed or operate the engine in service for at least one hour after the flushing solution has been

     heated up to the normal cooling water temperature.
4. Completely drain the system.
5. Check flushing fluid for deposits and precipitates.
6. Repeat step 2 to 5 if flushing fluid contains significant amounts of deposits or precipitates.
    Always allow the engine to cool down before draining and filling the system.
7. Check cooling system filters (if present). Replace when required.
8. Fill the system with a 5–7% **Green Up Cool** solution in fresh water and maintain in service between 6% and 10%

**Flushing Procedure for  equipment's Cooling Systems in Service**1. Completely drain the system if possible and proceed as per -  “flushing procedure for cooling systems in new equipment”.
2. If not possible, the system should be drained and filled concurrently to maintain the system water level But, reduce the content  of the  Nitrite treatment and remove as many contaminants as possible.
3. Fill the system with 7–10% solution of Green Up Cool in water.
4. Maintain the level in service between 6% and 10%.
   **Green Up Cool** will clean any deposits and sludge's from the system. These contaminants should be systematically removed by  partial    draining and skimming until the system is fully clean.
   **Green Up Cool** has very low depletion in service. Suppletion is only to make toping up for losses due to cooling water leakage.

 Concentration should periodically be checked by means of fractometer.

**Economics**

The outstanding corrosion protection and low additive depletion results in less maintenance and repair costs.

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 **Composition**This product is water based and contains a mixture of ingredients which are food industry safe. None of the ingredients are made from animals or animal products.

**Safety Precautions**

Do not ingest this product.

Avoid contact with eyes. In case of eye contact, rinse well with a large quantity of clean water flush for a minimum of 15 minutes.

In case of swallowing, drink a large amount of water or milk and seek medical attention. Keep away from children.

Keep the container in a closed shaded area.

Avoid exposure to extremely high temperature.

**Physical Properties**

Appearance:                     Clear colorless or green liquid
   pH @ 5% DILUTION         6-7
   Density                              1.03
   Flash Point                        None

**Health and Safety**

For full Health and Safety data please refer to our specific MSDS Sheet, which is available upon request**.

 Pack  Sizes**

 4lt, 18lt , 205lt barrels, 1000 litter canister