

APEX

QUARTERLY

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Not all descalers are created equal

Some descalers try to mimic *RYDLYME*,
while others claim they are better and safer.
But what's the truth?

Find out inside.
The truth may surprise you...

ALSO...

**THERE WILL BE SCALE... RYDLYME GETS DOWN & DIRTY IN OIL WELLS
WHAT HAPPENS WHEN YOU DON'T CLEAN YOUR COOLING TOWER**

Not all descalers are created equal

There are many reasons why **RYDLYME** has been around for more than 70 years.

"It's just like RYDLYME..."

That is the original marketing strategy that other companies have developed to sell their chemical descalers. Some products try to ride the coattails of **RYDLYME**, while others resort to creative wordplay to gain customers. But not all descalers are created equal.

RYDLYME has been around for more than 70 years and has earned the reputation of being the *World's Leading Biodegradable Descaler* by countless cus-

tomers and OEMs. **RYDLYME** has often been imitated, but never duplicated. While the proverbial phrase "imitation is the sincerest form of flattery" holds true in this case, it is misleading. It is putting the health and safety of customers, as well as equipment, at risk. The unique and complex formulation and blending process of **RYDLYME** gives it the ideal balance of effectiveness and safety. NO other formulation can duplicate that, and stating otherwise is grossly deceptive.

Let's present the facts so you can make an informed decision when it comes to your next chemical descaler purchase...

The RYDLYME Advantage As much as 12x faster & dissolves 50% more than other descalers!

RYDLYME significantly outperforms traditional mechanical cleaning methods (e.g. brushing, rodding, hydroblasting) when it comes to speed, effectiveness and efficiency. But did you know **RYDLYME** also

outperforms other chemical descalers not only in safety, but also speed and effectiveness?

In laboratory tests*, **RYDLYME** was as much as 12x **FASTER** and dissolved as much as **50% MORE** than other chemical descalers! Also, **RYDLYME** offers a cost-savings as the product is so concentrated that only a percentage of the product is needed in most applications. A huge difference from some descalers that require as much as 100% concentration!

Additionally, the unique and complex formula of **RYDLYME** quickly dissolves a wide array of mineral deposits and is safe on all materials associated with water-operated equipment and systems, including copper, brass, rubber and even stainless steel **ALL IN A SINGLE PRODUCT!**

What does this mean to you?

Aside from the timely and arduous work involved in mechanical cleanings (e.g. dismantling, individual tube cleaning, cleanup, disposal), spending sub-

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stantial time on jobs due to slow-acting descalers costs customers and even service companies lots of money. Why spend a day or even several days on a job when **RYDLYME** can complete most jobs in just a few hours?

With **RYDLYME**, there is no need for multiple and expensive products for a job that may involve various metals or materials throughout a system. Other descalers may be highly corrosive to certain metals and materials, thus requiring an entirely different product or products for the same job. Incorporating multiple products into a cleaning puts a great deal of responsibility on the service company and technicians to use the correct product(s) on a particular system to avoid damage, as well as additional expenditures for more products. Why even take the risk when you have one product in **RYDLYME** that is all-encompassing?

BUYER BEWARE!

The term “effective” is fairly ambiguous

As previously mentioned, many other chemical descalers state that they are just as effective, if not more effective than **RYDLYME**. What does that really mean?

There are other descalers that are “effective”, but...

- only on calcium carbonate, not iron oxide
- only at a high concentration (one product label even states to use at 100% concentration!)
- may take a day or several days to completely, or even mostly, get rid of a deposit
- only on certain pieces of equipment
- only on certain types metals and materials

You get the idea. Don't rely on wordplay or general statements. Do your research by reading a product's SDS and label, as well as running bench tests on your own. A bench test does not have to be complex or involved. Dropping a simple *TUMS* tablet into a small amount of

product will show how fast a product will work. As a comparison, do the test with a few different descalers (including **RYDLYME** of course!) and compare times. Even try different dilution rates (e.g. 100%, 50%, etc.) to determine which products work better. Just remember to wear safety equipment when handling other chemical descalers other than **RYDLYME** (see the *Health & Safety* section below)!

Also, ask other professionals in your field about what products to use or what products to avoid. Heck, contact us at **800.451.6291** or **630.820.8888** and we can elaborate on any of the information provided!

The **RYDLYME** Advantage

Non-hazardous & non-toxic with no health risk!

The use of **RYDLYME** does not require special safety equipment or procedures because it is a non-hazardous and non-toxic descaler! There are no toxic fumes and you can even **HOLD IT IN YOUR OPEN HAND WITHOUT INJURY!** [CLICK HERE](#) to see proof!

There are **NO** restrictions, special licenses or permits needed to transport or handle **RYDLYME**! Review *Section 14 Transportation Information* of each product's SDS to learn about restrictions.

What does this mean to you?

The safeness of **RYDLYME** quells any health and safety concerns when it comes to handling and transporting the product. You will have a much easier time introducing **RYDLYME** into any number of applications than with hazardous chemical descalers because there is no need for special hazmat equipment (e.g. respirator, suits), elevated temperatures or procedures (e.g. permits, special handling). Review *Section 8 Exposure*

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Controls/Personal Protection of each product's SDS to learn about protection.

Unlike other descalers, **RYDLYME** is 100% biodegradable **WITHOUT** neutralization! **RYDLYME** is certified by an EPA-approved testing facility as 100% biodegradable and environmentally non-hazardous at full concentration/as-received form. This means even at full concentration, **RYDLYME** is not only safe to handle, but also does not have a detrimental effect to the environment.

For example, an accidental spill at a facility with a container of **RYDLYME** does not necessitate special hazmat containment and disposal procedures, or even pose a safety or health concern to personnel or equipment. It can be safely disposed down a normal plant sewer or drain, followed by a thorough water flush and clean up is done. The same cannot be said about other descalers.

BUYER BEWARE! Biodegradability does not equate to safety

Erroneously, many descalers equate biodegradability to safety, but are actually highly hazardous and corrosive. Look closer at the label and SDS of other descalers and you will see that most of them are extremely hazardous and corrosive, requiring special safety equipment and procedures when handling and even transporting their products.

Some even base their safeness on the premise of being **ODORLESS!** This is an irrational claim considering carbon monoxide (CO) and hydrogen sulfide (H₂S) are also odorless and cause serious illness or even death. Additionally, other "biodegradable" descalers must be **FULLY** neutralized to be even remotely biodegradable. Review Sections 12-13 Ecological Information and Disposal Considerations of each product's SDS to learn about biodegradability, environmental concerns and disposal.

FIND OUT FOR YOURSELF! Read the SDS for **RYDLYME [HERE!](#)**

Know the Facts

For more than 70 years, **RYDLYME** has often been imitated, but never duplicated. The only thing **RYDLYME** Biodegradable Descaler has in common with similar products is the identity of a descaler. There is only one **RYDLYME** that encompasses superior performance and unparalleled health and safety.

We believe in integrity. As a chemical manufacturer, Apex Engineering Products Corporation is obligated to maintain and convey accurate information to our customers without any deception or distortion of facts, especially when it comes to health and safety. We are an **ISO 9001:2008 Certified Company**, upholding the highest level of quality and service to our customers.

We encourage you to do your research, ask questions and run tests with any product, especially chemical descalers. Contact us [HERE](#) or call us at **800.451.6291** or **630.820.8888** and we can discuss your particular application, provide comprehensive technical support or elaborate on any of the information you just read! 🧪

**Based on a 1 gram seashell (calcium carbonate) in 60 mL solution at 100% concentration.*

There will be scale

RYDLYME goes downhole to descale equipment

When it comes to the oil industry and our products, our **RYDALL** line of degreasers and cleaners (e.g. **RYDALL VP**, **DD**, **MP** and **CX**) may first come to mind. While those products are applicable to the industry, **RYDLYME** is unequivocally just as vital of a product for maintaining efficient operations.

In South America, **RYDLYME** is being used downhole to descale perforation components.

Brief overview of process and problems

A perforation, in the context of oil wells, refers to holes punched in the casing or liner of an oil well connecting it to the reservoir. In regards to cased hole completions, the well is drilled down past the section of the formation desired for production and will have a casing or liner run in separating the formation from the well bore.

The final stage involves running in perforating guns, a string of shaped charges, down to the desired depth and firing them to perforate the casing or liner, allowing the oil to enter the wellstream and be pumped out of the well.

The problematic area in this process is within the reservoir where the perforations get clogged with deposits from the constant flow of water incorporated with the oil. The accumulation of deposits reduce the amount of oil being pumped out resulting in less barrels per day, as well as costly and lengthy shutdowns for equipment repair or replacements.

Associated equipment inside and outside the oil well can also be affected by scale deposits, such as pumps, tubes, casing, heat exchangers and seals.

RYDLYME use and results

Prior to the introduction of **RYDLYME**, the oil companies reluctantly resorted to either harsh acids or complete removal and replacement of the equipment, all of which were arduous, more damaging, costly or all of the above.

After successful lab tests showing the effectiveness and safeness of **RYDLYME**, it was used in a couple of oil wells in the field.

RYDLYME was pumped down the wells to the perforations to descale the equipment (see diagrams). It was then pumped back out with the oil and water for processing.

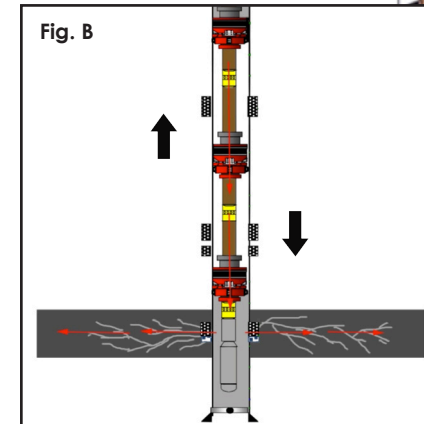
THE RESULTS WERE AMAZING!

On the first well, oil production increased from 86 barrels of oil per day (BOPD) to 181 BOPD! Production on the second well increased from 80 BOPD to a whopping 242 BOPD!

The safeness and biodegradability of **RYDLYME** made it an ideal solution for this application in not harming the equipment or surrounding environment. The clean-in-place ability of **RYDLYME** also provided a huge cost-savings. In addition to cleaning more oil wells throughout the area, **RYDLYME** is being used to clean pumps, exchangers, condensers and much more! 🧴

Fig. A

Ground level

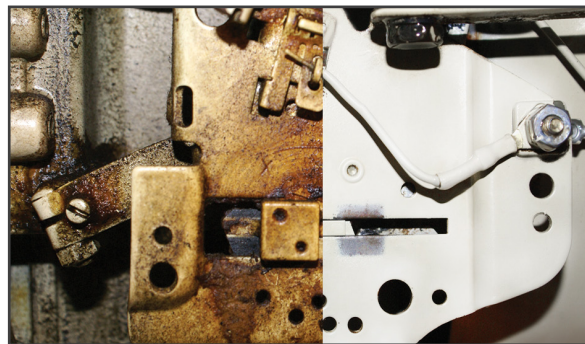


RYDLYME was pumped down the well to the perforations and into the reservoir (see Fig. B) where it was pumped back out with the oil for separation and disposal. This constant flow in and out of the perforations and entire well effectively dissolved the mineral buildup and increased production.

Perforations

Reservoir

In other product news...



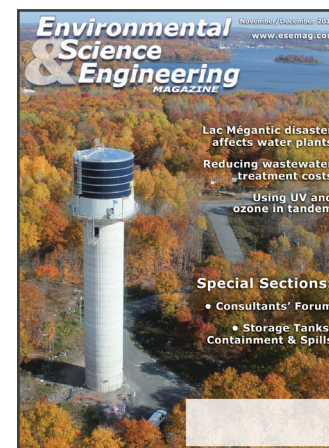
Spring start-ups for HVAC around the corner

Despite the massive snow storms and freezing temperatures that are crippling much of North America, it is not too early to start thinking about spring start-ups. While **RYDLYME** is the ideal product for cleaning chillers, cooling towers and more, we have exceptional biodegradable products for other vital HVAC components.

RYDALL CC Coil Cleaner safely and effectively cleans air-cooled condensers, permanent air filters, evaporator coils, window units and any other finned cooling/heating coils or equipment. It can be applied **INDOORS** or **OUTDOORS** as a non-foaming spray or through a foaming applicator to penetrate deep into the coil beds eliminating the need to carry multiple products to successfully complete a job. **RYDALL CC** is also safe on rubber membranes including roofing material!

RYDALL MP Multi Purpose Degreaser is a biodegradable, medium-duty surface degreaser/cleaner that quickly and safely removes oil, grease, grime, dirt and other contaminants from all surface types and components. **RYDALL MP** completely rinses off pollutants **WITHOUT** leaving behind a greasy film.

If you are in HVAC and would like to learn more about **RYDALL CC** and **RYDALL MP**, as well as **RYDLYME**, contact us [HERE](#) or call **800.451.6291** or **630.820.8888**.



RYDALL WO and its success featured in ESE magazine

RYDALL WO Water Optimizer and the science of non-active biocatalysts was featured in the November/December 2013 issue of *Environmental Science & Engineering* magazine. Read the article [HERE](#).

FOUL TERRITORY

A whimsical concoction of information in the world of scale, grease, odors and more.



Bovine backdraft

BERLIN (AFP) — A herd of dairy cows nearly lifted the roof off their barn in central Germany when methane released by the animals caused an explosion.

Police in Hesse state said in a statement that a static electric charge apparently triggered the detonation, and a spurt of flame, on Monday at a farm in Rasdorf. The roof was slightly damaged and one cow suffered light burns. No people were hurt.

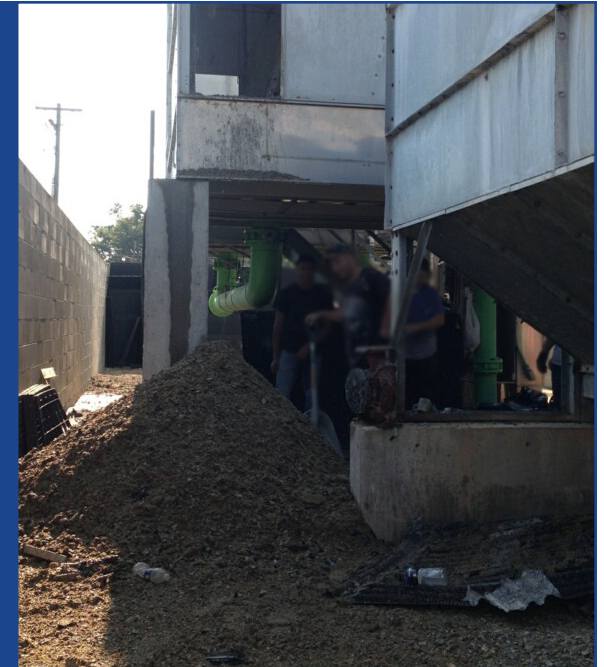
Police say 90 cows are kept in the shed and it wasn't clear why quantities of methane had built up. Bovine belching and flatulence releases large quantities of the gas. 🍷

What is that?

That is not a pile of dirt, but rather a large mound of deposits from a cooling tower.

So the next time you are contemplating whether or not to clean your cooling tower, just think of this picture...

Then give us a call to discuss how **RYDLYME** can safely and efficiently clean your cooling tower, and avoid having to find a shovel. 🍷



Ten most fithy, dirty jobs

10. Termite controller
9. Sewer plumber
8. Animal control specialist
7. Bat cave scavenger
6. Animal vet
5. Wine maker
4. Worm dung farmer
3. Chimney sweeper
2. Sewer inspector
1. Road kill cleaner



excerpt from weirdlyodd.com



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For 70 years, Apex Engineering Products has been formulating and manufacturing safe and biodegradable specialty cleaning chemicals for a diverse range of applications around the world. From our **RYDLYME** biodegradable descaler to our versatile **RYDALL** line of cleaners and degreasers, our products will decrease downtime and increase efficiency.

We are a fourth-generation, family-owned company renowned not only for our biodegradable line of products, but also our in-depth and exceptional customer support. With decades of knowledge and experience in a wide array of applications, our knowledgeable technicians will work closely with you to determine the best solution for your facility's unique challenges. To further minimize your downtime, virtually all orders are shipped out within 24 hours.

Apex Engineering Products also takes great pride in being an ISO 9001:2008 Certified Company providing the highest level of support and quality of products to our customers...**another formula that hasn't changed in 70 years!**

Made in the USA

DESCALER & PUMPING SYSTEMS



RYDLYME biodegradable descaler is specifically designed to dissolve the toughest water scale, lime scale, mud and rust deposits from virtually any piece of water-based equipment. **NSF-certified.**



RYDLYME Pumping Systems are specifically designed to circulate **RYDLYME** through a vast array of equipment and systems keeping your facility in peak operating condition.

CLEANERS & DEGREASERS



RYDALL CC Coil Cleaner is a biodegradable coil cleaner specifically designed to clean dirt, grease and soil residue from air-exposed surfaces of critical cooling or heating equipment. **NSF-certified.**



RYDALL MP Multi Purpose Degreaser is a biodegradable, medium-duty degreaser/cleaner that quickly and safely removes oil, grease, grime and other pollutants from all surfaces and components. **NSF-certified.**



RYDALL DD Definitive Degreaser is a biodegradable, heavy-duty degreaser used specifically on all carbon-based derivatives found on the oil and/or process side of your equipment or system.



RYDALL VP Specialized Degreaser is a biodegradable, pH neutral degreaser specifically designed to safely and quickly clean and degas refinery process equipment. It can be applied in circulation or vapor phase applications.



RYDALL CX Crude Deposit Cleaner is a biodegradable cleaner specifically designed to clean crude oil exchangers where pyrophoric corrosion deposits (e.g. iron sulfides) are present without having to pull bundles or dismantle exchangers.

ODOR CONTROL & WATER TREATMENT



RYDALL OE Odor Eliminator is a unique, environmentally beneficial biocatalyst containing a complex mixture of natural nutrients, vitamins, and trace elements designed to eliminate industrial odors and corrosion problems.



RYDALL WO Water Optimizer is an environmentally beneficial additive that disallows the formation of H_2S , COD, BOD, FOG, TDS and TSS. This unique biocatalyst is also effective in enhancing methane production and O_2 content.

[click on logos to learn more]