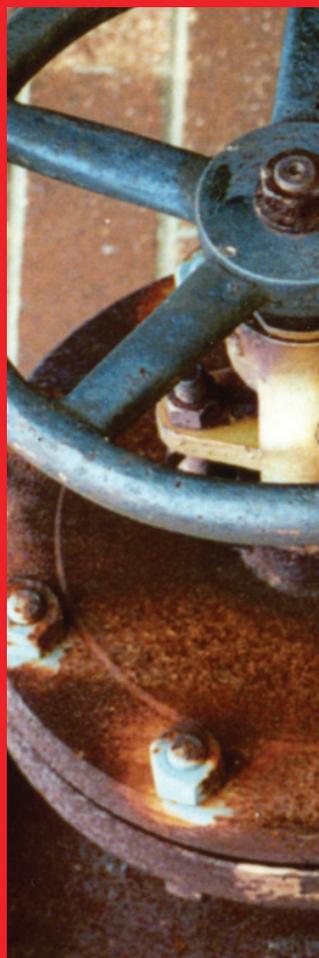


LA-CO®



CHEMICAL GUIDE

For MRO and PVF Applications

LA-CO Industries is a family-owned global manufacturing company specializing in the manufacturing of industrial hand-held markers, plumbing chemicals, and livestock identification products. Since 1934, we have taken pride in the design and manufacturing of high quality, performance-based products for our customers' unique applications.

LA-CO®

Our LA-CO® brand of high-quality, high-performance pipefitting and plumbing chemicals along with our industrial lubricants are trusted by trade professionals around the world. From homes to skyscrapers to the United States' National Archives Building in Washington D.C., LA-CO-branded high-performance thread sealants, fluxes, heat protection products, repair sealants, protect history's important documents and maintain the world's precious natural resources.

Today, LA-CO-branded products are sold around the world in over 30 countries. For more product information please visit www.laco.com.

Markal®

Our Markal® brand is the global leader in high-performance, hand-held industrial marking products. From our manufacturing locations in Elk Grove Village, IL, USA and Blyes, France we produce and sell high-performance industrial markers for the following industries: metal production, ship building, automotive assembly, welding and metal fabrication, building construction, lumber/timber processing, and many more.

For over 75 years, we have been proud to support the hardworking contractors that build the world's great bridges, ships, automobiles, homes, office towers, power plants, and many other engineering marvels with Markal products.

Today, Markal-branded products are sold around the world in over 60 countries. This broad network of long-term business partners provides our customers the highest level of service.

Our Mission

"To actively listen to our customers and meet or exceed their expectations by providing the highest quality performance products for marking, sealing, joining and other chemical specialty applications. To be environmentally responsible in the design and manufacture of our products. To promote the growth and well-being of our employees."



Table of Contents

Anti-Seize Formulas.....	3
Penetrants and Lubricants.....	4
Piping Installation and Repair.....	5
Thread Sealants.....	6-7

ANTI-SEIZE FORMULAS

LA-CO® EZ Break® formulas are premium quality anti-seize/assembly and lubricating compounds specially developed to protect metal parts from seizing, galling, rust and corrosion in the harshest industrial environments. EZ Break products reduce friction and wear on critical operating equipment and provide ease of assembly and disassembly.

EZ Break Copper Stick: An easy to use twist up stick formula for a no mess, drip or spill application.

EZ Break Copper Paste: Recommended for temperatures up to 1800°F.

EZ Break Nickel Paste: Recommended for extreme high temperature environments up to 2600° F.

EZ BREAK® COPPER STICK

Our no-mess EZ Break® Copper Stick protects metal parts from rust, corrosion, galling and seizing at temperatures up to 1800°F. EZ Break Copper Stick is the same trusted EZ Break formula as EZ Break Copper Paste offered in an innovative, convenient stick. Ideal for use overhead and on nuts, bolts, bushings, fittings, flanges, headers, manifolds, high heat ovens, turbine studs and automotive parts.

08930 - 2-1/4 Oz./Case:24

Features and Benefits

Lead free, non-setting and non-toxic
Meets Mil Spec Mil-A-907E
Made in the USA



EZ BREAK® COPPER

Containing fine copper particles in a lubricant paste, EZ Break® Copper Paste coats and protects metal from heat, pressure, rust and corrosion. Non-settling and non-toxic formula resists temperatures up to 1800° F. EZ Break Copper Paste can be used on nuts, bolts, shafts, valves, splines, compressors, boilers, bushings, pumps, fans and blowers, heat exchangers, cylinder assemblies and more.

08924 - 4 Oz. Brush-In-Cap/Case:24
08910 -10 Oz. Brush-In-Cap/Case:24
08916 -14 Oz. Aerosol/Case:12
08907 -16 Oz. Brush-In-Cap/Case:24

08925 - 8 Lbs.
08950 - 42 Lbs.
08969 - 425 Lbs.

Features and Benefits

Authorized by USDA for use in federally inspected meat and poultry plants
Meets Mil. Spec. Mil-A-907E
Made in the USA



EZ BREAK® NICKEL

Copper free, our EZ Break® Nickel Paste is designed to protect under extreme high pressure and heat. Formulated to lubricate metal and protect from rust and corrosion under harsh conditions, our EZ Break Nickel formula contains fine nickel particles. Recommended for use on nuts, bolts, shafts, valves, splines, compressors, boilers, bushings, pumps, fans and blowers, heat exchangers, cylinder assemblies and more.

08971 - 8 Oz. Brush-In-Cap/Case:24
08972 - 16 Oz. Brush-In-Cap/Case:24

08978 - 42 Lbs.

Features and Benefits

Working Temperature to 2600°F (1427°C)
Contains no Copper
Made in the USA



PENETRANTS AND LUBRICANTS

Penetrants and Lubricants are widely used chemicals in industrial plants and equipment maintenance. These LA-CO® products can be used for rust penetration, lubrication and protection from rust and corrosion.

Rust Buster®: An excellent product to loosen and release rusted/frozen parts.

Zoom Spout® Oiler: A general purpose industrial lubricant.

Pierce® Aerosol: An all in one lubricant that loosens and prevents rust or corrosion in hard to reach places.

RUST BUSTER® Rust Penetrant

For metal surfaces that need rust removal, Rust Buster® is the choice for professionals. Rust Buster® goes to work instantly, quickly loosening rusted bolts, screws, shafts, piping, and all types of "frozen" connections and assemblies. With a specially designed telescoping spout, LA-CO's Rust Buster® can reach up to 7" to penetrate rust in the tightest spaces. Recommended for use on all equipment, tools, chainsaws, cables, ignition systems, threaded parts, and any rotating or sliding metal surfaces.

Dozen Display Box

79706 - 4 Fl.Oz./Case:24

Features and Benefits

Special telescoping spout allows hard-to-reach areas up to 7" away
Safe for skin, clothes, metals and friction-type surfaces; contains no acids, alkali or other harmful ingredients
Made in the U.S.A.



ZOOM SPOUT® OILER General Purpose Lubricating Oil

When equipment is in hard to reach places, professionals use Zoom Spout® Oiler to get the job done. With a specially designed telescoping spout, LA-CO's Zoom Spout® Oiler can reach up to 7" to lubricate motors, bearings and more. Recommended for use on rotating and reciprocating equipment, bearings, motors and slides.

Dozen Display Box

79704 - 4 Fl.Oz./Case:24

Features and Benefits

Special telescoping spout lubricates hard-to-reach areas up to 7" away
Premium grade turbine oil is excellent for all general purpose lubricating
Made in the U.S.A.



PIERCE® All in One Rust Penetrant

For metal surfaces that need rust removal and lubrication, Pierce® is the choice for professionals. Its powerful aerosol formula drives under rust and penetrates into the tightest crevices to protect against rust and corrosion. While penetrating, it removes tar, grease, dirt and asphalt from the surface. Finally, Pierce lubricates the metal and helps prevent squeaks. Recommended for use on all equipment, tools, chainsaws, cables, ignition systems, threaded parts and any rotating or sliding metal surfaces.

79711 - 12 Oz./Case:24

Features and Benefits

Penetrates through rust for quick rust removal
Helps clean metal surfaces by removing tar, grease, dirt and asphalt
Colorless, moisture-repellent film guards against continuing rust and corrosion
Made in the U.S.A.



PIPING INSTALLATION AND REPAIR

LA-CO® offers products to make your soldering job easy, safe and leak free every time.

LA-CO Regular Flux: Recommended for use with all lead-free solders when joining copper pipe.

LA-CO M-A Flux: Recommended for use with all soft solders when joining stainless steel piping and joints.

Cool Gel® Heat Barrier Spray: Protects delicate valves and areas surrounding any soldering job from heat damage.

LA-CO® REGULAR FLUX Solder Paste

LA-CO® Flux is a water soluble flux that meets industry standard ASTM B813. With NSF and UPC approvals, this all-weather flux is the only flux you need for all of your copper soldering. Recommended for use with all lead-free and common soft solders, and on copper, brass, galvanized iron, lead, zinc, tin, silver, nickel, mild steel and terne plate.

22101 - 2 Oz./Case:48
22104 - 4 Oz./Case:48
22194 - 4 Oz. Brush-In-Cap/Case:48
22107 - 1Lb./Case:24

Features and Benefits

Water soluble
Non-acid, non-toxic and lead-free
All-weather formula for use in hot and cold climates
ASTM B813; contains no zinc chloride
Made in the U.S.A.
Meets Mil Spec MIL-F-4995 Type II



LA-CO® M-A FLUX Stainless Steel Flux Liquid

Developed for fast fluxing action on stainless steel, M-A Flux is excellent for use on stainless gutters and roofs, among many other applications. It contains no zinc chloride and it will not cause progressive corrosion on stainless pipe. There is no neutralizing necessary when using it to solder stainless steel. Recommended for use on/with all types of soft solders, stainless steel, chrome, copper, galvanized iron, lead and brass.

23904 - 4 Oz./Case:24
23913 - 1 Qt./Case:12
23914 - 1 Gal./Case:4

Features and Benefits

Contains no heavy metal chlorides so the metal is safe from flux damage
Do not use on potable water tubing
Made in the USA
Fed Spec Item Description A-A-51145C, Type 11B
ASTM B 32: Type 15



COOL GEL® Heat Barrier Spray

Cool Gel® can be used with any soldering or brazing job to protect components and materials from costly heat damage. Its unique gelled formula allows it to stick to surfaces without dripping, and it evaporates within 48 hours which eliminates cleanup. Easier to use than a heat blanket, Cool Gel is like having an insurance policy in your tool box. Recommended for use on/with new construction and piping installation

11513 - 1 Pt./Case:24
11509 - 1 Qt./Case:12
11503 - 5 Gal.
Dozen Display Box
11524 - 2 Oz./Case:48

Features and Benefits

Protects components and materials during soldering
Safe, non-toxic, harmless to skin and odorless
Protects rubber, plastic seals and gaskets from heat damage
Made in the USA





THREAD SEALANTS

LA-CO offers a variety of sealants for use on applications ranging from potable water pipes to heavy duty pipe, valve and fittings.

Contractor's Tape: An economical solution for basic pipe sealing.

Slic-tite® PTFE Tape: A premium grade high density thread sealing tape.

LEAK-TITE® Blue: An economy grade thread sealant for basic threaded pipe connections

Slic-tite Paste: A premium, solvent free thread sealant specially formulated with PTFE for added sealing power.

LA-CO LOC®: An anaerobic thread sealant for a leak free seal that holds up to heavy vibration.

PIPE THREAD TAPE OF PTFE Economy Grade

LA-CO® Pipe Thread Tape of PTFE provides a resistant seal on pipe threads for many types of service. This economy grade tape is 3 mils thick and works with basic piping systems. Recommended for use with metal and plastic piping.

44070 - 1/4" x 520"/Case:144	44075 - 3/4" x 520"/Case:144
44071 - 1/2" x 260"/Case:144	44076 - 3/4" x 1296"/Case:144
44072 - 1/2" x 520"/Case:144	44077 - 1" x 260"/Case:144
47272 - 1/2" x 520"/Case:72	44078 - 1" x 520"/Case:144
44073 - 1/2" x 1296"/Case:144	44079 - 1" x 1296"/Case:144
44074 - 3/4" x 260"/Case:144	

Features and Benefits

Pressure to 2,000 PSI (136 BAR)

Sealing temperature
-450°F to 550°F (-268°C to 288°C)

Meets Mil. Spec T-27730A



SLIC-TITE® PTFE THREAD TAPE Premium Grade

Slic-Tite® premium grade tape provides a highly resistant seal on pipe threads for all types of service. This high density 4 mils thick tape permits easy disassembly, even after many years of service. Recommended for use with solvents, chemicals, oxygen and on food lines.

Dozen Display Box	
44080 - 1/4" x 300"/Case:12	44085 - 3/4" x 300"/Case:12
44081 - 1/4" x 600"/Case:12	44086 - 3/4" x 600"/Case:12
44082 - 1/2" x 300"/Case:12	44087 - 1" x 300"/Case:12
44083 - 1/2" x 600"/Case:12	44088 - 1" x 600"/Case:12
44084 - 1/2" x 1200"/Case:12	44094 - 1/2" x 260" Yellow/Case:12
44101 - 1/2" x 600"/Case:144	44095 - 1/2" x 260" Pink/Case:12

Features and Benefits

Pressures to 2,000 PSI (136 BAR)

Sealing temperature
-450°F to 550°F (-268°C to 288°C)

Meets Mil Spec T-27730A



LEAK-TITE® BLUE Economy Grade

This blue sealant is excellent for sealing water, air, steam, natural gas, refrigerants, gasoline and ammonia. LEAK-TITE® Blue is safe, non-toxic and contains no solvents and washes off hands and clothes easily. Will not harden or dry out and remains flexible for easy disassembly. LEAK-TITE Blue is ideal for use on production lines and fabrication shops. Recommended for use on metals or plastics.

46009 - 1/4 Pt. Brush-In-Cap/Case:24
46029 - 1 Pt. Brush-In-Cap/Case:24
46013 - 1 Qt./Case:12
46049 - 1 Qt. Brush-In-Cap/Case:12
46069 - 55 Gal

Features and Benefits

Contains PTFE particles for greater sealing power
Pressures : to 1,500 PSI(102 BAR) for gas to 5,000 PSI (340 BAR) for liquid
Sealing temperature:
-50°F to 500°F (-46°C to 260°C)
Do not use on oxygen service
Will not harden or dry out over time, remains flexible for easy disassembly
Made in the USA



SLIC-TITE® PASTE Premium Grade

Slic-tite® Paste is a premium, solvent free thread sealant specially formulated with PTFE for added sealing power. This soft-set paste won't shrink or dry out. It has been successfully used for decades to seal water, air, steam, natural gas and more. Slic-tite washes off easily from skin and clothing, so you have less clean up time when the job is done. For use in extremely high pressure systems, Slic-tite comes with several approvals so that the job is completed to code. Recommended for use on metals and plastics, so you only need one thread sealant for many types of jobs.

41209 - 1/4 Pt. Brush-In-Cap/Case:12
42009 - 1/4 Pt. Brush-In-Cap/Case:24
41219 - 1/2 Pt. Brush-In-Cap/Case:12
42019 - 1/2 Pt. Brush-In-Cap/Case:24
42012 - 1 Pt./Case:24
42029 - 1 Pt. Brush-In-Cap/Case:24
42013 - 1 Qt./Case:12
42049 - 1 Qt. Brush-In-Cap/Case:12
42014 - 1 Gal./Case:4
42015 - 5 Gal.
42069 - 55 Gal.

Features and Benefits

Contains maximum PTFE for greatest sealing power
Pressures; 3,000 PSI (204 BAR) for gas;
10,000 PSI (680 BAR) for liquid
Sealing temperature; -50°F to 500°F
Do not use on oxygen service
Made in the USA
Approved by UL, CSA, NSF, UPC
and Noveon FBC



LA-CO LOC® Anaerobic Pipe Thread Sealant

Designed to harden and seal in the absence of oxygen, LA-CO LOC® Anaerobic Thread Sealant is excellent for heavy vibration areas such as fire sprinkler systems, compressors and reciprocating equipment. Solvent-free, LA-CO LOC will not shrink or weaken upon drying. Recommended for use on metal threads in heavy vibration area.

49050 - 50 Ml. (1.69 Fl. Oz.) Tube/
Case:12
49250 - 250 Ml. (8.45 Fl. Oz.) Tube/
Case:6

Features and Benefits

Pressures; 3,000 PSI (204 BAR) for gas;
10,000 PSI (680 BAR) for liquid
Sealing temperature -65°F to 400°F
(-54°C to 204°C)
Contains PTFE for a positive seal
Anaerobic adhesive provides locking power
Do not use on oxygen service
Made in the U.S.A.





LA-CO Industries Inc.

1201 Pratt Blvd.

Elk Grove Village

Illinois 60007 USA

1.800.621.4025

Fax 1.800.448.5436

Email customer_service@laco.com

Family owned and operated since 1934

laco.com

LP99R00089