

# COIL CLEANING

# **COMPLETE REFERENCE GUIDE**





# WHY SHOULD YOU CLEAN COILS?









# **EVAPORATOR**

Cleaning your evaporator is vital in helping keep your system up and running for years to come. Dirty evaporator coils can lead to high energy costs, decreased heat transfer, reduced airflow and contribute to adverse indoor comfort conditions.



# **CONDENSER**

Cleaning condenser coils is a key part of maintaining your system. Neglecting to clean condenser coils can also lead to increased energy costs, decreased system capacity as well as shortening the life of your equipment.



A clean evaporator coil is a vital aspect to ensure healthy indoor air quality. The evaporator coil is the primary source for IAQ issues such as mold and mildew, harmful VOCs, and disturbing odors. By regularly cleaning and disinfecting the evaporator coil, you can eliminate and control these issues and ensure superior indoor air quality.

# WHICH COIL CLEANER IS RIGHT FOR ME?

# **CONDENSER COIL CLEANERS**



#### What makes Nu-Brite #1?

- Heavy duty, designed for the toughest grease and grime removal
- High-foaming action to attack heavy soils and impacted coils
- Produces cleaner and brighter coils, restoring heat transfer and air flow 1 Gallon 4291-08 2.5 Gallon 4291-05 55 Gal Drum 4291-01 Aerosol 4291-18

Nu-Brite is a non-acid, alkaline-based product for cleaning and brightening air cooled condensers. Formulated with the best available foaming detergents and chelants, Nu-Brite quickly penetrates and dissolves greasy dirt and grime to foam it right out of the coil. Nu-Brite's state-of-the-art surfactants and cleaners instantly penetrate and lift layers of oily grime and corrosive deposits from the coil.



#### \*Alka-Brite® Plus

4120-08, 4120-05, 4120-01

- Brightens and cleans air-cooled condensers
- Foaming lifts dirt out of coils
- Non-acid, alkalinebased cleaner



#### \* Foam-Brite®

4178-08, 4178-05, 4178-01

- Ultimate foaming condenser coil cleaner
- Cleans and brightens better than acids
- Unique chelant/surfactant chemistry penetrates and lifts greasy soils



## Cal-Green™ 4190-08, 4190-01

- EPA Safer Choice
- Conforms to OEM specifications for cleaning microchannel coils





#### Nu-Solve<sup>™</sup> NR

4295-08

- No rinse
- For situations when it's desirable to have less diluted cleaner on the roof
- For use with Nu-Solve Sprayer (4775-0)



# $^{\dagger}$ Nu-Blast $^{@}$

4290-75

- Specially designed valve and dip tube provide exceptionally high pressure delivery
- Non-conductive
- No rinse



# TriClean 2X™ 4372-24

- Easy to use simply connect to hose, clean, and rinse
- Metal safe, biodegradable chemistry



# †Cal-Blast® 4132-20

- Works great on all soils
- No rinse
- Great for dissolving kitchen greases

# **EVAPORATOR & CONDENSER CLEANERS**



#### Tri-Pow'r® HD

4371-88, 4371-86, 4371-81

- Detergent-Degreaser-Deodorizer
- For cleaning air-cooled condensers/ evaporators, permanent filters, fan blades and more!

# Tri-Pow'r® HD Aerosol 4371-75

- Detergent-Degreaser-Deodorizer
- Great for mini-splits
- Powerful foaming spray





# **Green Clean®**

4186-08, 4186-24, 4186-01

- Powerful environmentally friendly formula for all purpose cleaning
- Biodegradable



# Blackhawk™

4127-75

- Safe for cleaning HVAC/R coils in food processing areas (NSF)
- Does not produce objectionable fumes
- Use with Talon (4776-0)



# \*Cal-Brite® Plus

4133-08, 4133-01

- Foams and brightens
- Reformulated to be tougher on scale



# CalClean<sup>®</sup>

4135-08, 4135-06, 4135-01

- Quickly dissolves stubborn soil residues, greases and dirt
- Will not corrode or tarnish aluminum or other metals



# Special HD CalClean®

4143-08, 4143-06, 4143-01

- The most effective heavy duty cleaner on the market
- Effective against all soils and buildup, especially nicotine tar on electronic air cleaners

# Clean Connect™ Easy & Mess Free!



The Clean Connect System is uniquely developed for the use of Nu-Brite 4x (4291-90), Alka-Brite Plus 4x (4120-90), Cal-Green 4x (4190-90) and Tri-Pow'r HD 4x (4371-90) concentrate coil cleaners for cleaning outdoor air cooled HVAC/R coils. The bottles in each of these cleaners contain a specific dilution tip insert assembly to where the Clean Connect Sprayer simply is hooked to the bottle and go! No more pouring and spilling of coil cleaner – the sprayer offers a cleaner connect system. The Clean Connect System provides the opportunity to take less space on the truck, and it's easier to ship to the job and handle at the jobsite. Sprayer comes with carrying bag and accessory to hook up the Nu-Calgon Probe (4774-1), which is available separately.

# **EVAPORATOR COIL CLEANERS**



# Evap Foam No-Rinse® 4171-75

- Cleans and deodorizes with pleasant lemon scent
- Self-rinsing, fastbreaking foam
- Use with Talon (4776-0)



# **Evap Pow'r®-C** 4168-08, 4168-05,

#### 4168-01

- Alkaline, near neutral pH formulation
- Highest technology in "no-rinse" coil cleaning



# Evap-Green<sup>1</sup>

4191-08, 4191-01

- Perfect for residential and light commercial applications
- Meets EPA Safer Choice Direct Release Criteria

# **Evap-Fresh® No Rinse**







Quart 4166-24 Gallon 4166-08 55 Gal Drum 4166-01 Aerosol 4166-75 Talon 4776-0



Evap-Fresh is a ready-to-use, non-abrasive, one-step cleaner and disinfectant for evaporator coils in small air conditioners, commercial air handling equipment, HVAC cooling coils and refrigeration equipment. It is the first product of its kind in the industry to receive EPA registration for such claims. Evap-Fresh works great to eliminate bacteria, viruses and odors. Plus, Evap-Fresh Aerosol works great on mini-splits!



#### **Gallon and Quart** 4166-08, 4166-24

Evap-Fresh in a one gallon bottle and quart spray have demonstrated effectiveness against viruses similar to 2019-nCOV on hard non-porous surfaces. This product is listed on the EPA's Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-COV-2, the Cause of COVID-19. This product is marketed with the intended use for HVAC systems.

# Coil Gun®





## Coil Gun® 4774-0

- Five mix ratio settings 3:1, 4:1, 6:1, 9:1 & 10:1
- Coil Gun Probe 4774-1

Nu-Calgon's Coil Gun introduces a time and money saving approach to applying Nu-Calgon Coil Cleaners. With five mix ratios, adjusting for light, medium or heavily impacted coils is quick and easy. Reducing product waste and eliminating the need for mixing helps you clean coils more efficiently. Using the foam wand attachments increases the amount of foam during the cleaning process. This is important for those heavy-duty applications. The pressure from the Coil Gun increases the cleaner's ability to penetrate and lift soils away from the coil. This foam also increases the exposure and dwell time of the cleaner, allowing the breakdown of the most stubborn soils. The visual effect of seeing the cleaner foaming also highlights areas of the coil where additional cleaner may need to be applied.

# PRODUCTS FOR MICROCHANNEL



Microchannel is a coil type used in many evaporator and condenser coils and can easily be identified by its flat tubes and fins between them that appear as waves between the tubes.

# Some products cannot be used on microchannel due to all aluminum construction.

It's best to use microchannel safe coil cleaners whenever dealing with aluminum construction; here are the best options when servicing microchannel units.



Tri-Pow'r HD®

Special HD® CalClean

CalClean®



Evap-Green™



Green Clean®



Nu-Solve™ NR



TriClean 2x™



Nu-Blast® Cal-Blast®



Evap Foam No Rinse®



Evap-Fresh® Blackhawk® No Rinse

# **COIL PROTECTION**



# **Cal-Shield**® 4148-08, 4148-32

- Forms protective shield on coils
- Reduces ability of dirt and grime to adhere to coil
- Extends life of coils operating in corrosive environments



# **DuraCoil**™ *4083-90*

- Protects coils from corrosion
- Durable, OEMapproved coating
- For coils in coastal regions, or in industrial or agricultural settings; protects refrigeration coils against food acids

# **SPRAYERS**

## Turbo Tank 4778-0

- Portable rinsing sprayer for use with clean water to rinse coil cleaner off of coil
- Durable sprayer with optimal 130 psi water pressure





Poly Sprayer 4770-0 3 pt



100P Sprayer 4770-2 1 gal



**200P Sprayer** *4771-20 2 gal* 



**300P Sprayer** *4772-0 3 gal* 

# PREVENTATIVE MAINTENANCE



iWave®-C, iWave®-R, iWave®-M, iWave®-V 4900-10, 4900-20, 4900-35, 4900-40

iWave devices utilize needle point bi-polar ionization technology, meaning they use two carbon fiber emitters to emit equal amounts of positive and negative ions. When these ions are injected into the air stream, they break down passing VOCs, pollutants and gases into harmless compounds like oxygen, carbon dioxide, nitrogen and water vapor without creating ozone or any harmful byproducts. When the ions come in contact with viruses, bacteria or mold, they remove the hydrogen molecules from the pathogens. Without hydrogen, the pathogens have no source of energy and will die. The ions also attach to allergens, such as pollen, smoke and other particles, causing them to band together until they are large enough to be caught by filters. The iWave line of air purifiers are the full comprehensive approach to providing cleaner and healthier indoor air quality.



# Bio-Fresh® cd

4126-34

Bio-Fresh cd is a ready-to-use bacteriostat, fungistat and deodorizer based upon chlorine dioxide technology. It is recommended for control of bacteria, mold, mildew, fungi and yeast in IAQ applications. Its EPA registration includes application in HVACR ventilating equipment, including coils, condensate pans, filters and duct-work.



4693-0

The Bio-Fresh fogger can be used to apply Bio-Fresh cd into ductwork or other ventilating systems.



# MINI-SPLIT-MAINTENANCE



# Complete Care Mini-Split Kit

4151-18

The Complete Care Mini Split Kit is a ready-to-use kit that includes everything you need to start cleaning and servicing mini-split systems. The kit includes (2) Tri-Pow'r® HD Aerosol cans 4371-75, (2) sets of Gel Tabs™ Mini 4185-95, (1) Clean Guard™ Maintenance Bag 4150-01, and (1) Nu-Calgon service bucket.



#### **Clean Guard**

4150-01, 4150-02, 4150-03
Clean Guard and Clean
Guard XL are reusable
maintenance bags
specifically for use by
HVAC contractors to clean
wallmounted mini-splits
with Nu-Calgon cleaners/
disinfectants when the
indoor coil and blower
require service. Clean
Guard CC is used to clean
ceiling cassette systems.



#### **Gel Tabs Mini**

4185-95

Gel Tabs are formulated with a breakthrough gel locking technology for treating air conditioning drain pans and lines. Keeps the drain pan from clogging and eliminates foul and musty odors. Treats up to 1.5 tons for 3 months.



61065

Eliminates odors caused by mold, mildew, bacteria, pets, smoke, musty odors, water damage, fire damage, paints, chemicals, animal decay, stale air, garbage areas, sewer gases, skunks, and more! Use in mini split, PTAC, or other ductless systems.



# SELECT THE RIGHT CLEANER FOR THE CLEANING JOB

NU-BLAST CAL-BLAST		•	•	•				•		•		•	•	•					Solvent			•			•					
BLACKHAWK		•	•	•	•	•	•	•		•		•	•	•					Alkaline	•		•		•		•			•	
EVAP FOAM NO RINSE					•	•	•	•		•		•		•					Alkaline	•		•		•		•			•	
GREEN CLEAN		•	•	•	•	•	•	•		•		•		•					Alkaline			•		*		•				
EVAP-FRESH NO RINSE					•	•	•	•						•					Alkaline	Aerosol Liquid			•	•		•				1= 10:1
1 22																				Aerosı			•	•		•				alClear
EVAP-					•	•	•	•				•		•					Alkaline					•		•	•	•		= 40:1, Ca
Indicate Services					•	•	•	•		•		•		•					Alkaline					•		•		•		CalClean
CAL-GREEN		•	•	•				•		•		•		•					Alkaline							•		•		s: Green Clean = 10:1, Tri-Pow'r HD = 10:1, Special HD CalClean = 40:1,  CalClean = 10:1
NU-SOLVE NR	NO Q	•	•	•				•		•	REMOVE	•	•	•				IEFITS	Alkaline			•			•	•				· HD = 10:1,
TRI-CLEAN 2X	EQUIPMENT USED	•	•	•				•		•	FORMULATED TO REMOVE	•		•				FEATURES & BENEFITS	Alkaline			•				•			•	1, Tri-Pow'r
SPECIAL HD CALCLEAN	EQUIP	•	•	•	•	•	•	•	•	•	FORMUL,	•	•	•	•		•	FEATUR	Alkaline			•		*		•	•			Clean = 10:
Gettern		•	•	•	•	•	•	•		•		•		•					Alkaline	Aerosol Liquid		•		*		•	•			Green
8																				Aeroso		•					•		•	
TRI-POW'R		•	•	•	•	•	•	•		•		•	•	•					Alkaline			•		*		•			•	ıse applic
CAL-BRITE		•		•	•		•			•		•		•		•	•		Acidic	•	•	•				•				s for no rir
ALKA-BRITE PLUS		•		•								•	•	•		•	•		Alkaline	•	•	•				•			•	Dilution ratios for no rinse applicatior
FOAM-BRITE		•		•								•	•	•		•	•		Alkaline	•	•	•				•			•	Q
NU-BRITE		•		•								•	•	•		•	•		Alkaline	Aerosol Liquid	•	•				•	•		•	
NU-E													_				-		AIK	Aerosol	•	•				•	•			*
PRODUCTS		Condenser Coils	Mini-Split Condenser Coils	Small Condenser Coils	Evaporator Coils	Mini-Split Evaporator Coils	Small Evaporator Coils	Microchannel Coils	Electronic Air Filters	Fan Blades, Permanent Filters		Greasy Dirt & Oil	Cooking Grease	Lint, Dust, Dirt & Grime	Tobacco Tars	Oxide (Corrosion) Deposits	Cottonwood/ Bugs		Product Type	Foaming	Brightening	Degreasing	EPA Registered Disinfectant	No Rinse (Evaporators)	No Rinse (Condensers)	Biodegradable	USDA Authorized	U.S. EPA's Safer Choice Program	NSF Registered	