

MATERIAL SAFETY DATA SHEET								
SECTION 1 - PRODUCT / COMPANY IDENTIFICATION								
PRODUCT NAME (AS USED ON LABEL AND LIST) PAC Klean Air Conditioning Condensate Cleaner Film					Page 1 of 3			
PRODUCT CODE PLN-F01		PRODUCT USAGE Air conditioner drain pan cleaning and disinfecting						
DISTRIBUTOR'S NAME PAC Corporation (Thailand) Co., Ltd.		EMERGENCY TELEPHONE NUMBER (66) 2347 0447						
ADDRESS 122 Vision Business Park phase 2 Soi Ramintra 55.8 Bangkheng Bangkok Thailand 10230		TELEPHONE NUMBER FOR INFORMATION (66) 2347 0447						
DATE PREPARED June 2016		SUPERSEDES October 2015						
SECTION 2 - INGREDIENTS / IDENTITY INFORMATION								
COMPONENTS (SPECIFIC CHEMICAL IDENTITY, COMMON NAMES)	CAS#	%W/W	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PP M	MG/M 3	PP M	MG/M 3		
Coco benzyl dimethyl ammonium chloride	68424-85-1	205	Not established					
Inert Ingredients	Proprietary	795	Not established					
SECTION 3 - HEALTH HAZARD IDENTIFICATION								
INHALATION	None expected							
SKIN	None expected, however, prolong contact may cause irritation							
EYES	May cause eye irritation							
INGESTION	May cause gastric distress, vomiting and diarrhea							
SECTION 4 - FIRST AID MEASURES								
INHALATION	No specific treatment is necessary, since this material is not likely to be hazardous by inhalation.							
SKIN	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention immediately.							
EYES	Flush eyes with water for 15 minutes; if irritation persists, seek medical attention immediately.							
INGESTION	Induce vomiting; seek medical attention immediately.							
SECTION 5 - FIRE FIGHTING MEASURES								
FLAMMABLE CLASS	Non flammable							
EXTINGUISHING MEDIA	Alcohol type foam, Carbon Dioxide, Water Fog							
HAZARDOUS COMBUSTION PRODUCTS	Oxides of carbon							
FIRE FIGHTING PROCEDURES & EQUIPMENT	This product is nonflammable; however hazardous decomposition products may be formed in a fire situation. Cool exposed containers with water spray. Respiratory and eye protection are required for firefighting personnel							
SECTION 6 - ACCIDENTAL RELEASE MEASURES								
GENERAL PROCEDURES	Gather products and dispose of as described in Section 13. Personnel should wear the necessary protective gear as describe in Section 8							
SECTION 7 - HANDLING AND STORAGE								
HANDLING PRECAUTIONS	No special handling is required. Keep out of reach of children							
STORAGE	Store in original packaging and shipping container. Do not open packaging if product is not to be used within 6 hours. Keep away from direct heat, sparks and other sources of ignition							
SECTION 8 - PERSONAL PROTECTION								
EYE/FACE PROTECTION	No special controls or personal protection required under condition of intended use							

MATERIAL SAFETY DATA SHEET					
PRODUCT NAME (AS USED ON LABEL AND LIST) PAC Klean Air Conditioning Condensate Cleaner Film					Page 2 of 3
RESPIRATORY PROTECTION		No special controls or personal protection required under condition of intended use			
SKIN PROTECTION		This product is safe for handling with bare hands. It is recommended to wash hands with soap and water immediately after handling			
SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES					
APPEARANCE		Blue rubbery film			
PHYSICAL STATE		Solid			
ODOR		None			
SOLUBILITY IN WATER		Slowly soluble			
MELTING POINT		90°C - 95°C			
BOILING POINT		N/A			
DECOMPOSITION TEMPERATURE		Not determined			
VAPOR DENSITY		N/A			
VAPOR PRESSURE		N/A			
SPECIFIC GRAVITY (WATER = 1)		1.8			
pH		7.0 - 7.8			
SECTION 10 - STABILITY AND REACTIVITY					
STABILITY		Stable under general conditions			
CONDITIONS TO AVOID		Extreme temperatures			
INCOMPATIBILITY		Strong oxidizers, Strong acids			
REACTIVITY		No additional hazardous chemicals are known to be formed when used as directed in this application			
SECTION 11 - TOXICOLOGICAL INFORMATION					
INGREDIENTS		CAS#		TOXICITY DATA*	
Coco benzyl Dimethylammonium chloride		68424-8-1		IRRITATION DATA*	
		Oral rat:		LD50: 200-2000mg/kg	
		Dermal rat:		LD50: 400-2000mg/kg	
*Data supplied by the distributor					
SECTION 12 - ECOLOGICAL INFORMATION					
No data available on the environmental impact of this product					
SECTION 13 - DISPOSAL CONSIDERATIONS					
All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generators.					
SECTION 14 - TRANSPORT INFORMATION					
	US DOT	IATA	IMO	ID/ADR	CANADIAN DG
SHIPPING NAME	Not regulated	Not regulated	No information available	No information available	No information available
HAZARD CLASS	N/A	N/A			
UN NUMBER	N/A	N/A			
PACKAGE	N/A	N/A			
There are no unreasonable risks (health, safety, or property) that this product would pose when transported in commerce. Hazard class definitions (49 CFR, Part 173) are not applicable to this product.					
SECTION 15 - OTHER REGULATORY INFORMATION					
OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)					
This product is considered non-hazardous under the Occupational Safety & Health Administration Hazard Communication Standard					

MATERIAL SAFETY DATA SHEET	
PRODUCT NAME (AS USED ON LABEL AND LIST) A PAC Klean Air Conditioning Condensate Cleaner Film	Page 3 of 3
TOXIC SUBSTANCE CONTROL ACT (TSCA)	
All ingredients used in PAC Klean Air Conditioning Condensate Cleaner Film are listed on the TSCA Inventory	
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):	
Section 302 (Extreme Hazardous Substances):	No components listed
Section 311, 312 (Hazard Categories):	N/A
Section 313 (Toxic Chemicals):	No components listed
CALIFORNIA PROPOSITION 65:	
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels that would require a warning under the statute.	
SECTION 16 - OTHER INFORMATION	
HMIS RATINGS	
HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 1 PERSONAL PROTECTION: None	
DISCLAIMER	
To the best of our knowledge, the information contained herein is accurate. However, PAC Corporation (Thailand) Co.,Ltd. do not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. NO WARRANTY, EXPRESSED OR IMPLIED OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE. In no event shall Advance Exchange Technology Co.,Ltd be liable for any special, incidental or consequential damage.	

MATERIAL SAFETY DATA SHEET		
SECTION 1 - PRODUCT / COMPANY IDENTIFICATION		
PRODUCT NAME (AS USED ON LABEL AND LIST) AC CONDENSATE COIL CLEANER		Page 1 of 3
PRODUCT CODE PLN-S01	PRODUCT USAGE Air conditioning coil cleaner, Removes dirt & oil, Self rinsing.	
DISTRIBUTOR'S NAME PAC Corporation (Thailand) Co.,Ltd.	EMERGENCY TELEPHONE NUMBER (66) 2347 0447	
ADDRESS 122 Vision Business Park phase2 Soi Ramintra 55.8 Bangkhen Bangkok Thailand 10230	TELEPHONE NUMBER FOR INFORMATION (66) 2347 0447	
DATE PREPARED October 2015	SUPERSEDES August 2009	
SECTION 2 - HAZARDS IDENTIFICATION		
EMERGENCY OVERVIEW	CAUTION. Mild eye irritant	
PHYSICAL STATE	Liquid	
COLOR	Colorless	
ODOR	Lemon Odor	
Eye Contact	Mild Eye Irritant	
Skin Contact	No adverse effects expected under typical use condition. Prolonged exposure to concentrate may cause dryness. Under the condition, use of gloves or skin moisturizer after washing may be indicated.	
Ingestion	May cause stomach or intestinal upset if swallowed (due to deterative properties)	
Inhalation	No adverse effects expected under typical use condition. Adequate ventilation should be present when using PAC Klean Coil Cleaner over a prolonged period of time. Open windows or other air-moving equipment if necessary.	
Carcinogens	No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens	
Medical Conditions	No medical conditions are known to be aggravated by PAC Klean Coil Cleaner.	
SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS		
Chemical Name	Volume % (W/W)	Property
- Ethoxylated alcohol	1.1	Detergent Cleaner
- Alkyl cocoamide	0.5	Detergent Cleaner
- Propylene glycol butyl ether	0.1	Detergent Cleaner
- Triethanolamine	0.5	Detergent Cleaner
- 2-Butoxyethanol	0.1	Oil Cleaner
- Fragrance	0.02	Scent
- H2O	97.68	Balance
Total	100	
SECTION 4 - FIRST AID MEASURES		
Eye Contact	Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids with water. Get immediate medical attention.	
Skin Contact	Wash with plenty of running water and soap if available for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.	
Inhalation	Remove from area to fresh air. Get immediate medical attention. If not breathing, clear airway and start artificial respiration.	
Ingestion	If swallowed, immediately give 3-4 glasses of milk (in unavailable, give water) do not induce vomiting. If vomiting does occur, give fluids again. Get immediate medical attention.	

MATERIAL SAFETY DATA SHEET	
PRODUCT NAME (AS USED ON LABEL AND LIST) AC CONDENSATE COIL CLEANER	Page 2 of 3
SECTION 5 - FIRE FIGHTING MEASURES	
Flash Point/Auto - Ignition	Not flammable
Extinguishing Media	Not flammable/non-explosive
Flammability Limits	Not flammable.
Special Fire Fighting Procedures	None required
SECTION 6 - ACCIDENTAL RELEASE MEASURES	
Personal Precaution	Avoid contact with eyes. Do not rub eyes with hands during clean-up. No special precautions for dermal contact are needed. Wash hands thoroughly after cleaning up spill or leak.
Procedure of follow in case of spill or leak	vacuate area. Identify source of leak or spill and contain with sand, earth, or containment bin. Then proceed to clean up spill or leak.
Method for cleaning up	Recover all reusable material. Cover remaining spill with inert absorbent material as non-hazardous waste. Rinse area with plenty of water and mop to sanitary sewer.
SECTION 7 - HANDLING AND STORAGE	
No special handling is required. Avoid contact with eyes. Wash hands thoroughly after handling. Keep in a closed plastic or stainless steel container. Store at ambient temperature. Avoid excessive heat.	
SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION	
Effects of Overexposure: No health effects information available for human exposure. Based on the available animal toxicity information for similar materials, it is anticipated that direct contact with this concentrate may possibly produce severe eye or skin irritation. Prolonged exposures may cause: headache, irritation of the eyes, nose and throat, drowsiness, lassitude, loss of appetite and inability to concentrate. Prolonged contact with concentrate may cause chemical burns with possible irreversible damage. Ingestion may cause burning pain in the mouth, throat and abdomen; swelling of the larynx; circulatory shock and/or convulsions. Mists Or vapors of this concentrate may cause irritation of mucous membranes.	
Engineering Controls	In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices
Respiratory Protection	When necessary, NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls
Protective Gloves	Rubber or neoprene, to prevent skin contact with concentrate.
Eye Protection	Where chemical splash goggles where there is potential for eye contact. Use safety glasses with side shields when there is no potential for eyes contact.
Other Protective Equipment	Eye wash; safety shower; protective clothing (long sleeves, coveralls, or other, as appropriate), when needed to prevent skin contact.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES	
APPEARANCE	Clear Liquid
ODOR	Lemon fragrance
SPECIFIC GRAVITY	1.025 ± 0.015
pH	11 - 12
Percent Volatile by Weight	90%
SECTION 10 - STABILITY AND REACTIVITY	
STABILITY	Stable
MATERIALS TO AVOID	None known
HAZARDOUS DECOMPOSITION PRODUCTS	None expected

MATERIAL SAFETY DATA SHEET	
PRODUCT NAME (AS USED ON LABEL AND LIST) AC CONDENSATE COIL CLEANER	Page 3 of 3
SECTION 11 - TOXICOLOGICAL INFORMATION	
Acute Toxicity	Oral LD ₅₀ (rat) > 10 g/kg body weight Dermal LD ₅₀ (rabbit) > 10 g/kg body weight
Eye Irritation	Moderate / Mild reversible eye irritation may occur based on relevant laboratory studies. This potential is reduced by immediate rinsing of eyes in case of eye contact.
Dermal Irritation	Mild, reversible skin irritation may occur based on relevant laboratory studies. A 6-hour exposure to human skin under a patch did not produce irritation.
Repeat Exposure Via Skin Contact	Based on relevant laboratory studies, no toxic effects are expected to be associated via Skin Contact with daily skin exposures (with up to 2 g/kg/day tested for 13 weeks on rabbits). Skin irritation may, however, occur with repeated or prolonged exposures.
Reproductive Effects Assessment	Based on Relevant laboratory studies (CD-1 mouse 18-week fertility continuous breeding), no adverse effects on reproduction, fertility, or health of Offspring are expected.
Note	This is expected to minimize the risks of substantial oral ingestion by humans and domestic animals or by wild animals or birds.
SECTION 12 - ECOLOGICAL INFORMATION	
Hazard to wild animals & aquatic organisms: Low, based on toxicological profile. Biodegradability: Readily biodegradable based on biodegradation profile	
SECTION 13 - DISPOSAL CONSIDERATION	
Waste Disposal Methods	Dispose of in compliance with all Federal, state and local laws, and regulation. Incineration is the preferred method.
Container Disposal	Triple Rinse (or equivalent), then offer for recycling or reconditioning or puncture and dispose of in sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning, stay out of smoke.
SECTION 14 - TRANSPORT INFORMATION	
DOT Hazard Classification	Non-Hazardous
DOT Shipping Name	Not regulated
TDG (Transport of Dangerous Goods)	Not regulated
DOT Label	None
CAS No	Mixture
SECTION 15 - REGULATORY INFORMATION	
All ingredients are listed on	EINECS, Canadian DSL, U.S.EPA TSCA inventory.
No. components listed under	Clean Air Act Section 112
RSRA Status	Not a hazardous waste.
CERCLA Status	No components listed.
SECTION 16 - OTHER INFORMATION	
DISCLAIMER	
The information provided with this MSDS is furnished in good faith and without warranty of any kind. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers. PAC Corporation (Thailand) Co., Ltd. Assume no additional liability or responsibility resulting from the use of, or reliance on this information	

MATERIAL SAFETY DATA SHEET								
SECTION 1 - PRODUCT / COMPANY IDENTIFICATION								
PRODUCT NAME (AS USED ON LABEL AND LIST) PAC Klean Air Conditioning Condensate Drain Pan Clean Tablet						Page 1 of 3		
PRODUCT CODE PLN-T01			PRODUCT USAGE Air conditioner drain pan cleaning and disinfecting					
DISTRIBUTOR'S NAME PAC Corporation (Thailand) Co.,Ltd.			EMERGENCY TELEPHONE NUMBER (66)2347 0447					
ADDRESS 122 Vision Business Park phase2 Soi Ramintra 55/8 Bangkhen BangkokThailand 10230			TELEPHONE NUMBER FOR INFORMATION (66)2347 0447					
DATE PREPARED June 2016			SUPERSEDES October 2015					
SECTION 2 - INGREDIENTS / IDENTITY INFORMATION								
COMPONENTS (SPECIFIC CHEMICAL IDENTITY, COMMON NAMES)	CAS#	%W/W	OSHA PEL		ACGIH TWA		SARA TITLE III	RQ LBS
			PP M	MG/M 3	PP M	MG/M 3		
Coco benzyl dimethyl ammonium chloride	68424-85-1	205	Not established					
Inert Ingredients	Proprietary	795	Not established					
SECTION 3 - HEALTH HAZARD IDENTIFICATION								
INHALATION	None expected							
SKIN	None expected, however, prolong contact may cause irritation							
EYES	May cause eye irritation							
INGESTION	May cause gastric distress, vomiting and diarrhea							
SECTION 4 - FIRST AID MEASURES								
INHALATION	No specific treatment is necessary, since this material is not likely to be hazardous by inhalation.							
SKIN	Remove contaminated clothing; wash affected area with soap and water; launder contaminated clothing before reuse; if irritation persists, seek medical attention immediately.							
EYES	Flush eyes with water for 15 minutes; if irritation persists, seek medical attention immediately.							
INGESTION	Induce vomiting; seek medical attention immediately.							
SECTION 5 - FIRE FIGHTING MEASURES								
FLAMMABLE CLASS	Non flammable							
EXTINGUISHING MEDIA	Alcohol type foam, Carbon Dioxide, Water Fog							
HAZARDOUS COMBUSTION PRODUCTS	Oxides of carbon							
FIRE FIGHTING PROCEDURES & EQUIPMENT	This product is nonflammable; however hazardous decomposition products may be formed in a fire situation. Cool exposed containers with water spray. Respiratory and eye protection are required for firefighting personnel							
SECTION 6 - ACCIDENTAL RELEASE MEASURES								
GENERAL PROCEDURES	Gather products and dispose of as described in Section 13. Personnel should wear the necessary protective gear as describe in Section 8							
SECTION 7 - HANDLING AND STORAGE								
HANDLING PRECAUTIONS	No special handling is required. Keep out of reach of children							
STORAGE	Store in original packaging and shipping container. Do not open packaging if product is not to be used within 6 hours. Keep away from direct heat, sparks and other sources of ignition							
SECTION 8 - PERSONAL PROTECTION								
EYE/FACE PROTECTION	No special controls or personal protection required under condition of intended use							

MATERIAL SAFETY DATA SHEET					
PRODUCT NAME (AS USED ON LABEL AND LIST) PAC Klean Air Conditioning Condensate Drain Pan Clean Tablet					Page 2 of 3
RESPIRATORY PROTECTION		No special controls or personal protection required under condition of intended use			
SKIN PROTECTION		This product is safe for handling with bare hands. It is recommended to wash hands with soap and water immediately after handling			
SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES					
APPEARANCE		Blue Rubbery Tablet			
PHYSICAL STATE		Solid			
ODOR		None			
SOLUBILITY IN WATER		Slowly soluble			
MELTING POINT		90°C - 95°C			
BOILING POINT		N/A			
DECOMPOSITION TEMPERATURE		Not determined			
VAPOR DENSITY		N/A			
VAPOR PRESSURE		N/A			
SPECIFIC GRAVITY (WATER = 1)		1.8			
pH		7.0 - 7.8			
SECTION 10 - STABILITY AND REACTIVITY					
STABILITY		Stable under general conditions			
CONDITIONS TO AVOID		Extreme temperatures			
INCOMPATIBILITY		Strong oxidizers, Strong acids			
REACTIVITY		No additional hazardous chemicals are known to be formed when used as directed in this application			
SECTION 11 - TOXICOLOGICAL INFORMATION					
INGREDIENTS		CAS#	TOXICITY DATA*		IRRITATION DATA*
Coco benzyl Dimethylammonium chloride		68424-8-1	Oral rat:	LD50: 200-2000mg/kg	Non sensitizing
			Dermal rat:	LD50: 400-2000mg/kg	
*Data supplied by the distributor					
SECTION 12 - ECOLOGICAL INFORMATION					
No data available on the environmental impact of this product					
SECTION 13 - DISPOSAL CONSIDERATIONS					
All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generators.					
SECTION 14 - TRANSPORT INFORMATION					
	US DOT	IATA	IMO	ID/ADR	CANADIAN DG
SHIPPING NAME	Not regulated	Not regulated	No information available	No information available	No information available
HAZARD CLASS	N/A	N/A			
UN NUMBER	N/A	N/A			
PACKAGE	N/A	N/A			
There are no unreasonable risks (health, safety, or property) that this product would pose when transported in commerce. Hazard class definitions (49 CFR, Part 173) are not applicable to this product.					
SECTION 15 - OTHER REGULATORY INFORMATION					
OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)					
This product is considered non-hazardous under the Occupational Safety & Health Administration Hazard Communication Standard					

MATERIAL SAFETY DATA SHEET	
PRODUCT NAME (AS USED ON LABEL AND LIST) PAC Klean Air Conditioning Condensate Drain Pan Clean Tablet	Page 3 of 3
TOXIC SUBSTANCE CONTROL ACT (TSCA)	
All ingredients used in PAC Klean Air Conditioning Condensate Drain Pan Clean Tablet are listed on the TSCA Inventory	
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):	
Section 302 (Extreme Hazardous Substances):	No components listed
Section 311, 312 (Hazard Categories):	N/A
Section 313 (Toxic Chemicals):	No components listed
CALIFORNIA PROPOSITION 65:	
This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels that would require a warning under the statute.	
SECTION 16 - OTHER INFORMATION	
HMIS RATINGS	
HEALTH: 1 FLAMMABILITY: 1 REACTIVITY: 1 PERSONAL PROTECTION: None	
DISCLAIMER	
To the best of our knowledge, the information contained herein is accurate. However, PAC Corporation (Thailand) Co.,Ltd do not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. NO WARRANTY, EXPRESSED OR IMPLIED OF MERCHANTABILITY, FITNESS OR OTHERWISE IS MADE. In no event shall Advance Exchange Technology Co.,Ltd. be liable for any special, incidental or consequential damage.	