



AVIATION

*PRODUCTS*

*FOR*

*AVIATION*



**MATERIALS CONFORMING  
TO U.S. SPECIFICATIONS  
2014**

The first column gives the specifications.

Military, Federal and Aerospace specifications are numerically indexed.

The second column in this list gives the applicable products.

The third column gives the description of the products.

## **MILITARY SPECIFICATIONS**

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
MIL-PRF-680A	SOLVENT-680 TYPE II (QPL)	Dry cleaning and degreasing solvent.
MIL-B-3242 B (SHIPS)	KEM - B.T	Boiler Compound, Navy
MIL-C-5410 B Type I Type II	M – 2220 M – 2240	Cleaning Compound, Aluminum Surface, Non flammable - Sustaining
MIL-C-5541 D	KEMCOT (Powder) KEMCOT - L (Liquid)	Chemical conversion coatings on Aluminum and Aluminum alloys.
MIL-C-5543 A	M – 2285	Cleaning Compound, Washing Machine, Aircraft Metal Parts.
MIL-C-6864 C	M – 2266	Cleaning Compound, Solvent, Oil Cooler.
MIL-R-8633	S – 2047	Remover, Paint, Non-Flammable.
MIL-C-10578 D Type I Type II Type III Type IV Type V	RR - 2333 RR – 2381 RR – 2360 RR - 2355 RR – 2359	Corrosion Removing and Metal Conditioning Compound (Phosphoric Acid Base).

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
MIL-C-11090 E	KEM - O.R	Cleaning Compound, Degreasing and Depreserving Solvent, Self-Emulsifying.
MIL-T-12879 Type I class 1	PHOSPHAT - Z 101	Treatment, Chemical, Prepaint and Corrosion Inhibitive for Zinc Surfaces.
MIL-C-13924 C	KEM – BLACK	Coating, Oxide, Black, for Ferrous Metals.
MIL-C-14460 C Type I	CR – 2001	Corrosion Removing Compound, Sodium Hydroxide Base, for Electrolytic or Immersion Application.
MIL-C-16173 D Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	PROTECTIVE OIL 1 PROTECTIVE OIL 2 WATER DISPLACER IS -2006 PROTECTIVE OIL 5	Corrosion Preventive Compound, Solvent Cutback, Cold - Application.
MIL-P-16232 F Type M  Type Z	PHOSPHAT - M (for classes 1,2,3) PHOSPHAT - Z 101 (for classes 1,2,3)	Phosphate Coatings, Heavy, Manganese or Zinc Base (For Ferrous Metals).
MIL-S-18718	KEM - SOLVE 2404	Solvent, Safety.

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
SAE-AMS-C-19853 C Type I class 1 Type I class 2 Type II class 1 Type II class 2	CARB - OVER 111 CARB - OVER 154 (QPL) S – 111 S – 154	Carbon Removing Compound (for use in agitating tank).
MIL-C-21614	SOFT SCALE REMOVER	Scale Removing Compound.
MIL-C-22230	M – 2260	Cleaning Compound, Fuel Tank and Bilge.
MIL-C-22542 B (AS)	M – 2255	Cleaning Compound, High Pressure Cleaner, Liquid
MIL-C-22543 E (AS)	KEM - KLEEN 21 KEM - KLEEN 22	Cleaning Compound, Aircraft Surface (Alkaline-Organic- Waterbase Emulsion).
MIL-C-23411 A	C.P – 2555	Corrosion Preventive Compound.
MIL-S-23496	M – 2280	Scale Conditioning Compound, Alkaline, Hot Section Jet - Engine Parts.
MIL-C-25107 B	CARB - OVER 115	Carbon Removing Compound, Orthodichlorobenzene for Engine Parts.
MIL-R-25134 B	KEM – 2040	Remover, Paint and Lacquer, Solvent Type.

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
MIL-I-25135	2008 CRACK DETECTION KIT	Inspection Material, Dye.
MIL-C-25769 J (USAF)	AC – 55	Cleaning Compounds, Aircraft Surface, Alkaline Water Base.
MIL-D-26549 A (USAF)	M - 2280 – 4	Descaling Compound, Alkaline, Hot Section Jet Engine Parts.
MIL-C-27251	KEM - KLEEN 33	Cleaning Compound, Aircraft Surface, Low Temperature.
MIL-C-38334 A Type I class 1	RR – 2322	Corrosion Removing Compound Prepaint, for Aircraft Aluminum Surfaces.
MIL-C-38736 B Type I Type II	KEM - SOLVE 336 KEM - SOLVE 346	Cleaning Compound, Solvent Mixtures (Metric).
MIL-C-43616 C Class 1	EC – 201 (QPL)	Cleaning Compound, Aircraft Surface.
MIL-R-81294 C	PR – 2025	Remover, Paint, Epoxy, Polysulfide and Polyurethane Systems
MIL-C-81302 D Type II Type IIA (spray)	KEM - SOLVE 1313 KEM - SOLVE 1313	Cleaning, Compound Solvent, for Electronic Parts

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
MIL-C-81309 Type II class 1,2 Type III class 1,2	PREVENTOL - 21 PREVENTOL – 31	Corrosion Preventive Compounds, Water Displacing Ultra - Thin Film.
MIL-C-81706 Form II Form III	KEMCOT (Powder) KEMCOT (Liquid)	Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys.
MIL-R-81903 A (AS) Type I,class 1	KEM - 2015 AP	Remover, Acid Activated, for Amine - Cured Epoxy Coating Systems.
MIL-R-83936 A (USAF) Types I and II Class 1 Class 2	S - 2020 S – 2055	Remover, Paint, Tank Types for Aircraft Wheels, Landing Gear Components and Other Aircraft and Age Components
MIL-R-83936 B (USAF)	S - 2067 H S - 2067 HD	Remover, Paint, Tank Types for Aircraft Wheels, Landing Gear Components and other Aircraft and Age Components.
MIL-PRF-85570 C Type I	KLEENOL-2000-PRO	Cleaning compound, Aircraft exterior, solvent Base. Water dilutable.
MIL-C-85704	K – 310	In-place Jet Engine Compressor Cleaner.
MIL-C-87936 B (USAF)	AC - 55 A	Cleaning Compounds, Aircraft Exterior, Surfaces Water dilutable.

## **FEDERAL SPECIFICATIONS**

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
P-C-111 D	CARB - OVER 166	Carbon Removing Compound.
TT-R-230 B		Remover, Paint (Alkali-Type for
Class 1	S - 2080	Hot Application).
Class 2	S - 2085	
TT-R-248 B	S - 2099	Remover, Paint and Lacquer,
	S - 2099 A	Solvent Type
TT-R-251 H		Remover, Paint (Organic Solvent
Type III class A	S - 2043	Type).
Type III class B	S - 2011	
Type IV class A	S - 2043	
Type IV class B	S - 2011	
P-C-436 E	KEM - KLEEN 41	Cleaning Compound Alkali Boiling Vat (Soak) or Hydrosteam.
P-C-437 B	M - 2288	Cleaning Compound, High pressure (steam) Cleaner.
P-C-444 B		Cleaning Compound Solvent
Type I	KEM-201(Non Phenolic)	Soluble, Grease Emulsifying.
Type II	KEM - 251(Phenolic)	



SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
TT-C-490 C		Cleaning Methods for Ferrous Surfaces and Treatments for Organic Coatings
Method II	KEM - SOLVE 2450 KEM - SOLVE 2452	Solvent (immersion, spray or vapor).
Method III	KEM - 255 KEM - 266	Hot alkaline immersion, spray or electrolytic) for ferrous surface only
Method IV	KEM - O.R 1 KEM - O.R 2	Emulsion (with or without added water).
Method V	ARR - I	Alkaline derusting (for ferrous surfaces only).
Method VI	R.R - 2333	Phosphoric acid type product.
Type I	PHOSPHAT - Z 101 PHOSPHAT - Z 111	Zinc phosphate
Type II	PHOSPHAT - F	Iron phosphate
P-S-661	KEM - SOLVE 2455	Dry Cleaning Solvent
P-D-680 Type II Replaced by MIL-PRF-680A O-C-1889	SOLVENT-680 TYPE II (QPL)  KEM - SOLVE 2444	Dry Cleaning and Degreasing Solvent.  Cleaning Compound, Safety Solvent.

**AEROSPACE MATERIAL SPECIFICATIONS**

SPECIFICATION NUMBER	PRODUCT	DESCRIPTION
SAE-AMS-1546A	CARB - OVER 115	Carbon Removing Compound, Orthodichlorobenzene for Engine Parts.
SAE-AMS-C-19853 C		
Type I class 1	CARB - OVER 111	
Type I class 2	CARB - OVER 154 (QPL)	Carbon Removing Compound
Type II class 1	S – 111	(for use in agitating tank).
Type II class 2	S – 154	

# **KLEENOL 2000 - PRO**

## **DESCRIPTION**

KLEENOL 2000 - PRO is a concentrated liquid, heavy duty, water dilutable cleaner which meets the requirements of BOEING Document D6-17487 and MIL-PRF-85570 C.

## **APPLICATION**

KLEENOL 2000 - PRO is designed especially for removing dirt, oil, light grease, light carbon and smoke stains from painted and unpainted exterior aircraft surfaces.

KLEENOL 2000 - PRO is safe for all kind of metals and well bonded painted surfaces. Can be used also as a cleaner for all aircraft components. Does not destroy the anodized surfaces.

## **USAGE**

KLEENOL 2000 - PRO may be used neat or diluted with water in varying concentrations depending on the heaviness of the soil.

1. For heavy duty cleaning: Dilute 1 part concentrate up to 5 parts of water.
2. For normal cleaning: Dilute 1 part concentrate up to 10 parts of water.
3. For light cleaning: Dilute 1 part concentrate up to 20 parts of water.

KLEENOL 2000 - PRO is applied by immersion, mopped or spraying. Allow to stand on surfaces for 5-10 minutes, then slightly move over the soiled areas with a mop and rinse off with high pressure water.

## **PRODUCT PROPERTIES**

Appearance : Clear liquid.  
Flash point : > 142 °F  
Compatibility : Metal, no action.

## **SAFETY**

KLEENOL 2000 - PRO is non toxic and not hazardous. Standard protective clothing is necessary when handling.

## **PACKAGING**

KLEENOL 2000 - PRO is available in 55 gallons drums.

## **KEM-KLEEN 68** **(AIRCRAFT INTERIOR CLEANER)**

### **GIVES 4 WAYS CLEANING ACTION : CLEANER – GERMICIDE – SANITIZER - DEODORIZER**

#### **Description**

KEM-KLEEN 68 is a pleasantly aromatized liquid, originally formulated to clean all interior aircraft surfaces.

Meets the requirements of AMS 1550 and BOEING DOCUMENT D6-7127. KEM-KLEEN 68 is safe to all inner surfaces and seats of aircrafts.

KEM-KLEEN 68 is not only a cleaner but ..... at the same time is a **GERMICIDE – SANITIZER – DEODORIZER.**

#### **Kills germs on contact**

KEM-KLEEN 68 is a true germicide ..... not just sanitizer. This effective product kills many germs including Staphylococci and many other dangerous bacteria that may threaten the health of passengers.

#### **A Real Deodorizer.....**

##### **“NOT JUST A COVER – UP”**

**By destroying many bacteria, KEM-KLEEN 68 destroys the source of most odors. Rather than merely perfuming a disagreeable smell, KEM-KLEEN 68 hits the cause – and leaves the air sweet and truly clean.**

#### **Uses**

KEM-KLEEN 68 is used for removing all customary soils as stains, oils, nicotine, crayon e.t.c. from inner surfaces and seats of aircrafts.

#### **Method of use**

KEM-KLEEN 68 is normally used diluted in water in a proportion ranging of 1 part of KEM-KLEEN 68 with 10-15 parts of water. The solution then is applied by spraying or swabbing. After a suitable wetting period, depending on degree and type of contamination, wipe off with a clean-dry cloth. Stubborn spots may require application of a more concentrated solution. Rinsing is not required, but is desirable for most effective removal of loosened dirt film.

#### **Safety**

KEM-KLEEN 68 is non flammable, biodegradable, non toxic and non hazardous. Use standard protective clothing when handling.

## **KEM-DEODORANT**

### **AIRCRAFT TOILET DISINFECTANT / DEODORIZER**

KEM-DEODORANT is a completely soluble, non flammable, non corrosive liquid toilet disinfectant / deodorizer.

KEM-DEODORANT is formaldehyde free and all the detergents are biodegradable. It contains chemical and aromatizing agents which do not just mask, but actually prevent the formation of odors.

At use concentrations, KEM-DEODORANT is non-corrosive to all metals and materials used in the toilet systems.

Because it is a liquid, KEM-DEODORANT it is easier in handling than powders or pellets. It also contains a deep-blue color indicator, which allows ease inspection of tanks for presence of deodorant. KEM-DEODORANT solution lasts throughout the complete flight and does not require constant checking or "in-flight" replenishing.

#### **Utilization**

The recommended concentration for KEM-DEODORANT is 1-4 gram per liter of total capacity of the system reservoir. To maintain this concentration, reestablish the intensity of the blue coloration by adding small quantities of KEM-DEODORANT.

This proportion can be reduced or increased depending in the flight duration and the desired result.

#### **Use Precaution**

KEM-DEODORANT does not present any particular toxicity, nevertheless, in the event of contact with the skin, rinse with water.

----- .... -----

# **AC - 55 - A**

## **DESCRIPTION**

AC-55-A is an alkaline water based compound, which meets the requirements of the BOEING Document D6 - 17487 and MIL-C-87936 Type I.

## **APPLICATION**

AC-55-A is formulated to effectively clean painted and unpainted surfaces. Removes dirt, grease, petroleum and synthetic oils, light carbon etc. It is safe on all metals, paint, plastics and plexi-glass.

## **USAGE**

AC-55-A may be used neat or diluted with water in varying concentrations depending on the degree of the soil.

1. For heavy duty cleaning: Dilute 1 part AC-55-A up to 5 parts of water.
2. For normal cleaning: Dilute 1 part AC-55-A up to 10 parts of water.
3. For light cleaning: Dilute 1 part AC-55-A up to 20 parts of water.

### **AC-55-A is applied by immersion, mopping or spraying :**

- a) **Immersion** : Immerse objects in AC-55-A and allow soil to loosen. Then rinse with water under pressure. The immersion time should be at least 15 minutes and up to 12 hour depending on the degree of the soil.
- b) **Mop or Spray** : Apply AC-55-A over all soiled areas. Allow it to act between 15 - 30 minutes, then rinse with water under pressure.

**NOTE** : On occasion may be necessary to brush heavy soiled areas with stiff bristle brush before rinsing.

## **PRODUCT PROPERTIES**

Appearance	: Clear liquid
Boiling point	: 100 °C
Solubility in water	: Complete in all proportions
Specific gravity	: 1,030 $\pm$ 0,005 gr/cm <sup>3</sup>
pH	: 10 - 11

## **SAFETY**

AC-55-A is odorless, non flammable, biodegradable, non toxic and non hazardous. Use standard protective clothing when handling.

## **PACKAGING**

AC-55-A is available in 210 Lt drums.

# **KEM-KLEEN 55 A**

## **Description**

KEM-KLEEN 55 A is an alkaline water base liquid product which meets the requirements of MIL-C-87936 Type I.

## **Application**

KEM-KLEEN 55 A is used for the exterior cleaning of painted or unpainted aircraft surfaces. Removes efficiently all kind of dirt such as oil, grease, mud, smoke etc.

It is safe for all kind of metals and does not attack paint coatings.

## **Usage**

KEM-KLEEN 55 A is applied by spray, mop or brush neat or diluted with water in a proportion of one part of KEM-KLEEN 55 A up to 20 parts of water as follows :

- a. For heavy duty cleaning is used neat or diluted up to 8 parts of water.
- b. For light duty cleaning is applied diluted in a proportion of 1:5 to 1:20 with water.

Allow the solution to remain on the surface for 5 to 10 minutes. The complete cleaning of the surfaces is accomplished using a stiff bristle brush and finally with a water rinsing under pressure.

## **Product properties :**

Appearance : Colorless liquid.

pH (10 % sol) : 10,5 - 11,5

Flash point : None.

Corrosiveness : Does not affect metals and paint coatings.

## **Safety**

KEM-KLEEN 55 A is no toxic. All minimum safety precautions must be taken during handling.

## **Packaging**

KEM-KLEEN 55 A is available in 55 gallons drums.

-----

# **EC - 201**

## **DESCRIPTION**

EC-201 is a concentrated liquid, heavy duty, water dilutable cleaner which meets the requirements of BOEING Document D6-17487 and MIL-C-43616 C.

## **APPLICATION**

EC-201 is designed especially for removing dirt, oil, light grease, light carbon and smoke stains from painted and unpainted exterior aircraft surfaces.

EC-201 is safe for all kind of metals and well bonded painted surfaces. Can be used also as a cleaner for all aircraft components. Does not destroy the anodized surfaces.

## **USAGE**

EC-201 may be used neat or diluted with water in varying concentrations depending on the heaviness of the soil.

1. For heavy duty cleaning: Dilute 1 part concentrate up to 5 parts of water.
2. For normal cleaning: Dilute 1 part concentrate up to 10 parts of water.
3. For light cleaning: Dilute 1 part concentrate up to 20 parts of water. The same dilution is used when should be used for cleaning acrylic surfaces.

EC-201 is applied by immersion, mopped or spraying. Allow to stand on surfaces for 5-10 minutes, then slightly move over the soiled areas with a mop and rinse off with high pressure water.

## **PRODUCT PROPERTIES**

Appearance : Clear brown liquid.  
Flash point : > 142 °F  
Compatibility : Metal, no action.

## **SAFETY**

EC-201 is no toxic and hazardous. Standard protective clothing is necessary when handling.

## **PACKAGING**

EC-201 is available in 55 gallons drums.

-----..-----



# **KLEENOL - 2000**

## **Description**

KLEENOL-2000 is a viscous green color liquid, capable to remove many difficult impurities from painted and unpainted aircraft surfaces.

## **Application**

KLEENOL-2000 is applied for :

-Removing efficiently oils, greases, dust, mud etc.

-Removing oxides from aluminum parts, cleaning stainless steels parts etc.

KLEENOL-2000 is safe for aluminum, magnesium, cadmium plated steels, titanium and plexiglass when used according the instructions.

It isn't flammable and toxic.

## **Usage**

KLEENOL-2000 is used diluted in water and applied by spray or mop.

1).Cleaning of white colour of aircrafts.

Dilute in water in a proportion of 1:3. Apply by spray or mop and allow to remain on the surface for 2-5 minutes.

2).Cleaning of camouflage paint scheme.

Dilute in water in a proportion of 1:10 to 1:20.

Apply by mop or spray. Allow to remain on the surface for 3-5 minutes.

3).Cleaning of unpainted aluminum surfaces, engines components etc.

a. For steel parts use KLEENOL-2000 neat or diluted in water depending on the amount of soils.

b. For aluminum parts don't use KLEENOL-2000 neat but diluted in water in a proportion of 1:3. The contact time is about 1-3 minutes.

To all mentioned above cases, follows a thorough brushing and rinsing with water under pressure.

## **Safety**

Avoid contact with skin and eyes. Wear protective clothes when handling. In case of contact rinse with plenty amount of water.

## **Packaging**

It is available in 55 gallons drums.

----- ... -----

## **K - 310**

### **(ON-LINE CLEANER FOR GAS TURBINE COMPRESSORS)**

#### **Description**

K-310 is a concentrated liquid cleaner which has proved effective in the removal of oil, salt and solid deposits from compressor blades, guide vanes, and rotors of industrial, marine and aviation gas turbine engines while the engine remains at normal speed and load. Periodic cleaning of these components is necessary to avoid power loss and abnormal temperature increases.

It is also a very effective off-line crank-wash compressor cleaner and meets the requirements of **MIL-C-85704 B**.

#### **Application**

1) For On-Line, Fired Washing.

On-line cleaning with K-310 is normally carried out by mixing 1 part of K-310 concentrate with 4 to 8 parts of demineralized, distilled or deionized water into a stable solution.

Dosage, dilution and frequency of use depends on engine size, severity of fouling and operating environment. Detailed user instructions and recommendations are provided in the EUROCHEM manual and by our technical staff.

**Two typical procedures for cleaning is given in our bulleting in-place cleaning Gas Turbine Compressors.**

2) For Off-Line, Crank Washing.

For Off-Line or crank-wash application mix one part K-310 with 4 to 8 parts distilled, demineralized or deionized water. Allow the solution to soak in the compressor for a period of 20 to 30 minutes.

Follow with a thorough clean water rinse.

When used with existing off-line injection systems, volume of K-310, washing frequency etc, should be as per standard compressor wash routine of the operator and recommendations of the manufacturer.

**NOTE : The above procedures are typical, however, the process recommended by the Engine Manufacturer should be followed.**

#### **Packaging**

K-310 is packaged in 210 litters drums and in 30 litters containers.

----- ... -----

# **DRY CLEANING**

## **Description**

DRY CLEANING is a liquid safety product with high flash point blended of solvents and petroleum derivatives.

Meets the requirements of P-D-680 Type II.

## **Application**

DRY CLEANING has a wide application for the in-situ cleaning of oil, grease, mud, carbon deposits etc. from engines, electrical equipments and aircraft surfaces. It can be used also for cleaning painted surfaces which are not affected by DRY CLEANING.

## **Usage**

DRY CLEANING is used neat and may be applied by brush, swab, spray or immersion.

After treatment the parts are allowed to dry.

## **Product properties**

Appearance : Uncolor liquid.

Flash point : 60 min.

Specific gravity (60 °F) :  $0,795 \pm 0,005$ .

## **Safety**

DRY CLEANING must be used in well ventilated areas. Avoid the prolong contact with hands. Wear protective clothes when handling (glasses, gloves, faceshields etc.).

## **Packaging**

It is available in 250 lt drums.

----- .... -----

# **CALIBRATING FLUID**

## **Description :**

Our company produces two different calibrating fluids under the U.S military specification MIL-C-7024 C , TYPE I and TYPE II .

TYPE I material has a flash point below 0 °C, so it is inappropriate because of its flammability for the climatic environment of the East and Middle East countries where the temperature is high.

TYPE II material is much more appropriate for warm climates and it has the following properties :

## **Physical & Chemical Properties**

Specific Gravity, 15.6°C / 15.6°C	: 0.770 ± 0.005
Viscosity, Centistokes at 25°C	: 1.17 ± 0.05
Gum, Existent mg/100 ml (Max)	: 5.0
Initial Boiling point, °C (Min)	: 149
Final Boiling point, °C (Max)	: 210
Recovery Percent (Min)	: 98.5
Flash Point, °C (Min)	: 38
Aromatics, vol. Percent (Max)	: 20.0
Olefins, vol. Percent (Max)	: 5.0
Particulate Matter, mg/l (Max)	: 2.0
Mercaptan Sulphur, percent weight (Max)	: 0.001
or Doctor Test	: Sweet
Total Corrosion (Max)	: No. 1
Total Acid number, mg KOH/g (Max)	: 0.015

Our company produces also Calibrating Fluid according to MIL-C-7024 C TYPE I, under request.

**Packaging** : Calibrating Fluid is available in drums of 210 lt. and in 20 lt. pails.

# **CARB-OVER 154**

## **Description**

CARB-OVER 154 is a two layers phenolic type, liquid product, which meets the requirements of MIL-C-19853 Type I, class 2.

## **Application**

CARB-OVER 154 is applied for removing carbon deposits, oils, greasers etc. from the components of reciprocating and "jet" engines of the aircrafts.

Removes many types of paint coatings and it is safe on aluminum, ferrous, magnesium etc. Doesn't attack the anodize coatings.

## **Usage**

CARB-OVER 154 is used cold and only by immersion.

The parts to be cleaned must be totally immersed in the lower layer and should be positioned in baskets so that minimum drag-out occurs.

Paints and lacquers are usually softened in about 30 - 45 minutes. Sludge of carbon/burnt oil will require a soak of about 1 - 3 hours and hard carbon may necessitate an overnight soak to affect removal. The paint and carbon can be removed after softening has taken place by high pressure water rinsing.

## **Product properties**

Appearance : Two - layers liquid.  
pH (lower layer) : >10  
Corrosiveness : Doesn't corrode metals.  
May swell rubbers.

## **General information**

Mild steel or stainless steel tanks are suitable for operating baths.

The upper layer is an aqueous solution which contains catalysts and corrosion inhibitors. Prevents also the evaporation of the lower layer.

In time to time an addition of water is necessary in order to minimize the drag-out of the upper layer.

## **Safety**

Contains phenols and chlorinated hydrocarbons. Avoid contact with skin and eyes. Wear protective clothes when handling.

## **Packaging**

It is available in 55 gallons drums.

----- ... -----

## **R - 1122**

### **Description**

R-1122 is a strong aircraft paint stripper tank-type in liquid form with two-layers which meets the requirements of MIL-R-83936 A Type I, class II and Type II, class II and BOEING DOCUMENT D6-17487.

### **Application**

R-1122 is applied mainly for removing paint coatings from the landing gear wheels of aircrafts.

It is excellent for the removal of the most types of paint coatings such as polyurethanes, epoxies, nitrocelluloses etc.

R-1122 except paints removes also carbon deposits oil, grease etc.

### **Usage**

R-1122 is used only cold and by immersion. The parts to be stripped must be totally immersed in the lower layer. Most paint schemes will be removed fairly readily but the very resistant types may require several hours soaking. After soaking parts must be rinsed with water under pressure.

### **Product properties**

Appearance : Liquid with two-layers.

pH (low layer) : > 10.

Compatibility : Doesn't corrode metals.

May swell rubbers.

### **General information**

Mild steel or stainless steel are recommended for tank construction.

The upper layer is an aqueous solution containing anti-corrosion agents, special additives etc.

The aqueous solution of upper layer prevents the evaporation of the lower layer which is the drastic one.

Add water in order to minimize the drag-out loss of the upper layer.

### **Safety**

R-1122 contains chlorinated solvents and phenolic bodies. Avoid contact with skin, eyes and clothing. Gloves, goggles, face shields are recommended when handling.

### **Packaging**

R-1122 is available in 55 gallons drums.

----- ... -----

## **S – 2055**

### **Description**

S – 2055 is a strong aircraft paint stripper tank – type in liquid form with two – layers which meets the requirements of MIL – R – 83936 A Type I, class II and Type II, class II and BOEING DOCUMENTS D6 – 17 487.

### **Application**

S- 2055 is applied mainly for removing paint coatings from the landing gear wheels of aircraft. It is excellent for the removal of the most types of paint coatings such as polyurethanes, epoxies, nitrocelluloses etc. S – 2055 except paint, removes also carbon deposit oils, greases etc.

### **Usage**

S- 2055 is used only cold and by immersion. The parts to be stripped must be totally immersed in the lower layer. Most paint schemes will be removed fairly readily but the very resistant types may require several hours soaking. After soaking parts must be rinsed with water under pressure.

### **Products properties**

Appearance : Liquid with two – layers  
pH ( low layer ) : > 10  
Compatibility : Doesn't corrode metals.  
May swell rubbers.

### **General information**

Mild steel or stainless steel are recommended for tank construction. The upper layer is an aqueous solution containing anti – corrosion agents, special additives etc. The aqueous solution of upper layer prevents the evaporation of the lower layer which is the drastic one. Add water in order to minimize the drag – out loss of the upper layer.

### **Safety**

S – 2055 contains chlorinated solvents and phenolic bodies. Avoid contact with skin, eyes and clothing. Gloves, goggles, face shields are recommended when handling.

### **Packaging**

S - 2055 is available in 55 gallon drums.

## **S-2067-H & S-2067-HD**

### **Description**

S-2067-H is a powerful paint stripper of two layers - tank type - which works hot and meets the requirements of MIL-R-83936 B.

### **Application**

S-2067-H is applied ,mainly for removing paint coatings from the landing gear wheels of aircrafts. Corrodes also the most types of paint coatings such as polyurethanes, epoxies, nitrocelluloses etc.

It is safe for all metals and does not attack the anodic coatings.

Except paints removes also oil, grease, carbon deposits etc.

### **Usage**

S-2067-H is used only by immersion and hot at a temperature of 65-85 °C.

The parts are immersed in such a way to assume that they are in contact with the lower layer which is the drastic. Allow parts to remain in the stripper until blistering of the paint coatings. The complete removal of the paint residues is accomplished with water under pressure.

### **Product properties**

Appearance : Liquid of two layers.

pH (lower layer) : > 10.

Compatibility : Does not corrode metals.

May swell rubbers.

### **General Information**

Mild steel or stainless steel tank are suitable for operating baths. The upper layer is an aqueous solution which contains catalysts, corrosion inhibitors and prevents the evaporation of the lower layer. In time to time an addition of water is necessary in order to minimize the drag-out of the upper layer.

S-2067-HD is a new product which meets the requirements of MIL-R-83936 B. Presents less evaporation of the drastic solvent of the lower layer because this solvent has a distillation point greater than 180 °C.

### **Safety**

S-2067-H does not contain phenols and chromates. Avoid contact with skin and mainly with eyes.

It is recommended to wear protective clothes when handling.

### **Packaging**

S-2067-H and S-2067-HD are available in 25 kg drums and plastic pails of 35 kg.



# **RADOM - NC**

## **Description**

RADOM-NC is a viscous non phenolic liquid product, special formulated to remove paints from "radomes" and "fiberglass parts" of the aircrafts.

## **Application**

RADOM-NC is used mainly for removing "primers" and main paint coatings from the "radomes" of the aircraft without damaging the structure of the radomes if used according to instructions.

It can be used also for removing varnishes and lacquers from metal surfaces and is suitable for "vertical" surfaces as viscous.

## **Usage**

RADOM-NC is applied heat by spray or mup. Apply a sufficient amount of the product on the surface to be stripped and let to act for 30 minutes, taking care to non "dry". Then agitate all areas with a stiff bristle brush and finally rinse with a jet of water.

Take care to avoid contact of the product with "bare" areas of "radomes" or "fiberglass".

## **Product properties**

Appearance : Viscous liquid.

Flash point : None.

Compatibility : Does not affect metals.

Affects the adhesives of "radomes" or "fiberglass"

## **Safety**

RADOM-NC contains chlorinated hydrocarbons. Avoid contact with skin and specially with eyes. In case of contact rinse affected part with plenty of water.

Take all minimum precautions during handling.

## **Packaging**

RADOM-NC is available in 55 gallon drums.

## **S – 2099 – A**

### **Description**

S – 2099 – A is a non phenolic thickened, aircraft paint stripper which meets the requirements of BOEING Documents D6 – 17487 and U.S. Specifications TT – R – 248, TT – R 251, MIL – R 25134 and MIL – R – 8633.

### **Application**

S- 2099 – A is a paint remover that easily and quickly strips such coating as acrylics, nitrocelluloses, baked enamel, zinc chromate primer, synthetic enamel, varnish and lacquer. S- 2099 – A stripes also some kinds of epoxies and polyurethane paints. It is safe to all kinds of metals.

### **Usage**

S- 2099 – A can be applied as received by brushing or spraying. Because of its thickness it is ideal for vertical surfaces. Allow S- 2099 – A sufficient dwell time for thorough loosening or blistering of the paint. When the paint is loose, thoroughly agitate all areas with a stiff bristle brush . A complete removal of paint residues is accomplished with high volume of cold water with pressure. Normally a coat of S- 2099 – A is sufficient to remove more than one paint coatings.

### **Product properties**

Appearance	: Viscous liquid
Flash point	: None
Metal	: No action

### **Safety**

S – 2099 – A contains chlorinated solvents. Avoid contact with skin, eyes and clothing. Gloves goggles, face shields are recommended when handling.

### **Packaging**

PR – 2025 is available in 55 gallons.

### **Note**

For all difficult coatings such as epoxies or polyurethanes use our product PR – 2025 which is much stronger.

# **KEM - 2040**

## **DESCRIPTION**

KEM-2040 is a thickened, non phenolic aircraft paint stripper which meets the requirements of BOEING Document D6-17487 and MIL-R-25134 B.

## **APPLICATION**

KEM-2040 is a viscous liquid developed to remove multiple coats of paint. It clings to vertical as well as the underside of horizontal surfaces. KEM-2040 strips various types of paints such as baked enamel, lacquer, varnish, synthetic enamel, zinc chromate primer, epoxies and polyurethanes.

## **USAGE**

KEM-2040 can be applied as received by brushing or spraying. Because of it is thick is ideal for vertical surfaces.

Allow KEM-2040 sufficient dwell time for thorough loosening or blistering of the paint. When paint is loose, thoroughly agitate all areas with a stiff bristle brush. The complete removal of the paint residues is accomplished with high volume of cold water with pressure.

Normally a coat of KEM-2040 is sufficient to remove more than one paint coatings.

## **PRODUCT PROPERTIES**

Appearance	: Viscous liquid
Flash point	: None to boil
Metal	: No action
Plastics, Plexiglas	: Swelled

## **SAFETY**

KEM-2040 **does not contain phenolic bodies**. Contains chlorinated solvents and methanol. Avoid contact with skin, eyes and clothing. Gloves, goggles, face shields are recommended when handling.

## **PACKAGING**

KEM-2040 is available in 55 gallons.

## **K – 2025**

### **(EPOXY & POLYURETHANE PAINT REMOVER)**

#### **Description**

**K-2025** is a very effective, thickened paint stripper, which meets the requirements of MIL-R-81294D Class 1.

#### **Application**

**K-2025** is especially designed for removing epoxy and polyurethane paints as well as other difficult to remove organic coatings from the metal surfaces of the aircrafts. It is safe for all type of metals.

#### **Advantages**

- ! Safe to all metals.
- ! Very effective, normally removes more than one coating of paint.
- ! Non-flammable.
- ! Easily rinsed with cold water.
- ! Can be applied by brush or non-atomizing spray methods.
- ! Used as received. No mixing or dilution required.
- ! Used at room temperature.

#### **Usage**

**K-2025** can be applied as received by brush or spray. Because it is thick it is ideal for vertical surfaces.

Allow **K-2025** sufficient dwell time for thorough loosening or blistering of the paint. When paint is loose, thoroughly agitate all areas with a stiff bristle brush. The complete removal of the paint residues is accomplished with high pressure, high volume, cold water or with a steam cleaning machine.

Normally a coat of **K-2025** is sufficient to remove more than one coating of paint.

Where multicoat systems have to be removed, it may be necessary to use more than one application of **K-2025**.

#### **Safety**

**K-2025** contains chlorinated hydrocarbons and phenolic bodies. Avoid contact with skin, eyes and clothing. Gloves, goggles, face shields are recommended when handling. For further information refer to Material Safety Data Sheet.

#### **Packaging**

**K-2025** is available in 55 gallons.

# **KEM - 2015 AP**

## **Description**

KEM-2015 AP is a viscous, water rinsable, aircraft paint stripper, containing a balanced blend of solvents, emulsifiers, thickening agents and corrosion inhibitors, which meets the requirements of MIL-R-81903 TYPE I, class 1.

## **Application**

KEM-2015 AP is especially designed for removing mainly polyurethane, epoxy paints and other difficult to remove organic coatings.

Since the product is of a viscous nature, it is ideal for use on vertical or inclined surfaces.

KEM-2015 AP is non corrosive to most of metals such as Aluminum, Titanium, Cadmium plated steels etc. .Do not use KEM-2015 AP on Magnesium and Magnesium alloys.

## **Usage**

KEM-2015 AP should be liberally applied as received by brushing or spraying.

Allow KEM-2015 AP sufficient dwell time to thorough loosening or blistering of the paint. It is preferable to remove the bulk of the loosened paint with a scraper before rinsing with a jet water.

Where multicoat systems have to be removed, it may be necessary to use more than one application of KEM-2015 AP.

## **Product Properties**

Appearance : Viscous liquid.

Flash point : None.

Compatibility : No action on all metals except Mg.

## **Safety**

KEM-2015 AP contains phenols and chlorinated hydrocarbons. Avoid contact with skin, eyes and clothing including gloves and eyeshields.

## **Packaging**

KEM-2015 AP is available in 250 kg drums.

# **KEM - SOLVE 2475**

## **Description**

KEM - SOLVE 2475 is a non flammable liquid wipe solvent, especially formulated to substitute all flammable solvents used in aircraft industries. Meets the requirements of BOEING Document D6-17487.

Meets also the corrosion requirements of MIL-R-81294.

## **Application**

KEM - SOLVE 2475 is used for :

- the cleaning of fuel tanks.
- the removal of the paint residues.
- the cleaning of the surfaces after stripping.
- the removal of oils, greases etc.
- the cleaning of the spray guns after painting.

KEM - SOLVE 2475 leaves surfaces free of residues, has high cleaning efficiency and is safe for all kind of metals. Because of it is practically non flammable can be used even when current is on.

## **Usage**

KEM - SOLVE 2475 is applied neat by spraying or mopped.

## **Product Properties**

Appearance : Colorless liquid.

Flammability : Non flammable.

T.L.V : 500 p.p.m.

KEM - SOLVE 2475 is 2,5 times less toxic than M.E.K which has T.L.V 200 p.p.m.

## **Safety**

KEM - SOLVE 2475 must be used in well ventilated areas and must be kept away from sun.

It is recommended when handling to use gloves, aprons, face shields e.t.c.

## **Packaging**

KEM - SOLVE 2475 is available in 55 gallons drums.

-----...-----

# **KEM - SOLVE 1212**

## **DESCRIPTION**

KEM - SOLVE 1212 is a liquid product with high flash point which meets the requirements of BOEING Document D6-17487.

## **APPLICATION**

KEM - SOLVE 1212 is used for removing oils, greases, dust, light carbon deposits etc from electric equipment, machineries, electrical cables, generators etc. Does not destroy plastic surfaces and is safe for all kind of metals. Has high cleaning and solvency capacity.

## **USAGE**

KEM - SOLVE 1212 is applied neat by spraying, mopping or brushing.

## **PRODUCT PROPERTIES**

Appearance : Clear colorless liquid.

T.L.V : 400 p.p.m.

KEM - SOLVE 1212 in confront of tetrachloride has a margin of safety about 20-30 times greater.

## **SAFETY**

KEM - SOLVE 1212 must be used in well ventilated areas and must be kept away from sun.

It is recommended when handling to use gloves , aprons , face shields etc.

## **PACKAGING**

KEM - SOLVE 1212 is available in 55 gallons drums.

## **N. I. G.**

### **Description :**

N. I. G. Is a completely new technology liquid product which has been specially produced to replace the 1, 1, 1 Trichloroethane for cleaning requirements with the following Advantages :

- a) Non - toxic or hazardous
- b) It can be recycled
- c) Used in cold & hot applications ( Vapor decreasing )
- d) Practically odorless
- e) Safe to all metals
- f) High cleaning ability
- g) Non - flammable
- h) Evaporates very fast and totally, leaving no residues.

### **Use :**

N. I. G. Is used for removing oil, grease, dust, light carbon and other filth from engines, spare parts, machinery, equipment, electric apparatus, generators, cables, switches, relays, video turners, potentiometers, transistors and electronic equipment. It does not attack plastic, insulating materials, cables and has high cleaning ability. It is applied with a brush or paintbrush by dipping or spraying.

### **Approvals :**

N. I. G. covers the following approvals :  
**BOEING specification D6 - 17487**

### **Precautions :**

N. I.G. is non - toxic and non - harmful, nevertheless health regulations suggest to take all the necessary preventive precautions as for all solvents.

### **Package :**

N. I. G. is available in Drums of 55 gallon



## **M - 2280 - 4**

### **Description**

M-2280-4 is a strong alkaline liquid product which meets the requirements of MIL-D-26549 A.

### **Application**

M-2280-4 is a product specially designed for cleaning and removing carbon deposits, metallic oxides and "heat scales" from the "hot section" engine parts.

M-2280-4 can be used for stripping "SermeTel W" type paint.

It is safe for ferrous metals, magnesium and stainless steels parts but it is not safe for aluminum, tin, zinc and their alloys.

### **Usage**

It is extremely important to notice that the application method varies depending on the use of the product.

When M-2280-4 is used in Aviation according to MIL-D-26549 A, it should be used neat by immersion in a temperature between 115 - 120 °C. The immersion time is appointed to 45 - 60 minutes.

For cleaning titanium parts the temperature must be 72 - 77 °C.

Because the operating temperature of the solution is greater than the boiling point of the water and because the solution level must be constant, it is necessary to add hot water in order to maintain the temperature of the solution at 115 - 120 °C.

All parts after cleaning are rinsed in hot water and follows the procedure using permanganate and phosphoric or nitric acid solutions.

### **Alternative Use**

For other applications, according to the degree of contamination, M-2280-4 could be used in lower temperatures up to 90°C and may be diluted with water in a proportion 1 : 1

### **Product properties**

Appearance	: Clear liquid
Specific gravity	: 1,28 ± 0,5
Flash point	: None

### **Safety**

M-2280-4 contains alkaline materials. Avoid contact with skin and eyes. Wear protective clothes when handling.

### **Packaging**

M-2280-4 is available in 55 gallons drums.

## **CR - 2001**

### **Description**

CR-2001 is a strong alkaline product in powder form without cyanide salts which meets the requirements of MIL-C-14460 Type I.

### **Application**

Aqueous solutions of CR-2001 are capable of removing rust oils, greases, scales and many air dried paints.

It is safe on ferrous, magnesium, copper, stainless steels and must not be used on aluminum, tin, zinc and their alloys.

### **Usage**

CR-2001 is used in a concentration of 37 % by weight in water (37 kg of CR-2001 diluted in 63 kg of water). The solution must be kept at a temperature of 95 - 100 °C. The immersion time depends on the amount of soils to be removed but generally a 15 - 60 minutes immersion time is sufficient to remove the most of soils.

Air or mechanical agitation of the solution minimizes the immersion time. A thorough rinsing with water follows the usage of CR-2001.

In case that the part to be cleaned is titanium or its alloys the operating temperature must be kept at 72 - 77 °C and the concentration at 16 %.

### **Product properties**

Appearance : White powder.

pH (1 % sol) : > 12.

### **Safety**

CR-2001 contains strong alkali compounds. Avoid contact with skin and eyes. Rinse with plenty of water in case of contact.

Wear protective clothes when handling.

### **Packaging**

CR-2001 is available in plastic barrels of 25 or 50 kg.

----- ... -----

## **RR - 2322**

### **Description**

RR-2322 is a phosphoric acid based viscous material containing surfactants ,which meets the requirements of MIL-C-38334 TYPE I, class 1.

### **Application**

RR-2322 is designed to remove corrosion products from the Aluminum and its alloys surfaces of the aircrafts.

Does not attack the painted surfaces and the acrylic parts of the aircraft.

It is not safe for Magnesium and high strength steels.

### **Usage**

RR-2322 is used by spray, brush or dipping at ambient temperature and diluted in water in a proportion of 1:1.

Allow the solution to remain on the surface for 5-15 minutes depending on the corrosion grade.

Using a bristle brush remove all loosening corrosion products and rinse with water under pressure.

Do not allow the product to dry on the surface.

RR-2322 removes the anodized coatings if is used as supplied. For removing light oxidation from anodized surfaces dilute RR-2322 in a proportion of 1:4 with water.

### **Product properties**

Appearance : Viscous, colorless liquid.

Flash point : None.

Compatibility : Affects only Magnesium and high strength steels.

### **General information**

All needed machinery (pumps, tanks etc.) must be of stainless steel, polyethylene or polypropylene.

If the surface is dirty with oil, grease etc. use special degreasers before applying RR-2322.

The viscosity of the product decreases during storage for long period.

### **Safety**

RR-2322 contains acidic ingredients. Avoid contact with skin and eyes. Wear protective clothes when handling.

### **Packaging**

It is available in 55 gallons drums.

# **RR – 2360**

## ***(INHIBITED)***

### **Description**

RR-2360 is an acidic liquid product containing surfactants and corrosion inhibitors. RR-2360 meets the requirements of MIL-C-10578 D Type III.

### **Intended Use**

RR-2360 is used as a corrosion removing and metal conditioning compound which, when diluted with water and applied to metal surfaces, will remove rust from ferrous metal surfaces and provide a slight etching action for ferrous and nonferrous metals to promote the adhesion of paint or corrosion preventives.

RR-2360 is intended for use on chromium plated ferrous surfaces and on those ferrous surfaces which require very close tolerances.

It can be used also as the third "tank" of a cleaning series tanks for removing heat scales from the "hot" section parts of a jet engine.

RR-2360 can alternatively be used on aluminum for preparing aluminum parts for painting.

Do not use on zinc, tin and galvanized surfaces.

### **Usage**

Add 1 part of the concentrated material as received to 1 part of water by volume. Remove heavy rust by wire brush and grease with a grease solvent before applying the compound.

Apply by spray, dip or flow-brush. Allow the conditioner to remain on the metal surfaces long enough so that the rust is loosened or dissolved and may be removed by rinsing with hot water. When the surface is dry, it may be coated, preserved with a corrosion preventative or put directly into service, as circumstances may indicate.

### **Safety**

RR-2360 contains acidic ingredients. Avoid contact with skin and eyes. In case of contact rinse thoroughly with plenty of water. Wear protective clothes when handling.

### **Packaging**

RR-2360 is available in 55 gallons drums.

----- .... -----

# **KEMCOT**

## **Description**

KEMCOT is a specially designed product in powder form used in order to achieve a chemical conversion coating on aluminum and its alloys. The coating has an iridescent to light yellow-brown color depending the alloy.

KEMCOT meets the requirements of MIL-C-81706 Type 1A.

## **Application**

KEMCOT is applied on aluminum surfaces and serves as a protective coating - temporary- against corrosion. The solution of KEMCOT acts also as a tie between the surface and the paint coatings.

## **Usage**

The chemical conversion coating on aluminum known as "alodine" is applied by spray, mop or immersion.

KEMCOT is used diluted in water in a proportion of 0,5 - 1 %.

The operating time is 30 seconds to 5 minutes depending on the aluminum alloy and the condition of the solution.

After treatment the parts must be rinsed twice. First in water at ambient temperature and then with deionized water at a temperature of 50°C. Then all parts must be dry in an oven (60°C max).

## **Product properties**

Appearance : Brown powder

pH (1 % sol) : 1,5 - 2,1

## **Safety**

KEMCOT is caustic. Avoid contact with skin and eyes. Rinse with plenty of water in case of contact. Wear protective clothes when handling.

## **Packaging**

KEMCOT is available in plastic pails or plastic bags of 25 kg.

----- ... -----

# **KEM-KLEEN 41**

## **Description**

KEM-KLEEN 41 is a lightly alkaline product in powder form which meets the requirements of P-C-436 E.

## **Application**

KEM-KLEEN 41 removes oil, grease, light carbon deposits etc. from the components of reciprocating and "jet" engines of the aircrafts. It is safe on aluminum, ferrous, magnesium etc.

## **Usage**

KEM-KLEEN 41 is used by hydrosteam cleaning machines or by immersion. KEM-KLEEN 41 is diluted in water in a proportion of 5-6 %. For better cleaning results the solution must be operated at the boiling temperature. The cleaning time is approximately 15-30 minutes. A thorough rinsing with hot water removes all residues.

When KEM-KLEEN 41 is used by spraying, a previous dilution in the above proportions must be done using hot water.

In order to remove tenacious deposits it is recommended the addition of "Hexylene Glycol" solvent in a proportion of 1 part of solvent to 9 parts of KEM-KLEEN 41 5-6 % solution.

## **Product Properties**

pH (5 % sol) : 12

Corrosiveness : Does not corrode metals.

## **Safety**

KEM-KLEEN 41 is no toxic. Regular safety precaution must be taken in order to avoid contact with skin and eyes (gloves, faceshields, etc.).

## **Packaging**

It is available in plastic pails of 50 kg.

----- .... -----



**OLYMPIC**  
AIRWAYS

TECHNICAL OPERATIONS DEPT.  
MATERIAL MANAGEMENT DIV.  
ATHENS AIRPORT (WEST)  
GR 16604 HELLINIKON  
GREECE

Athens, 04.02.96

TO : EUROCHEM

Marine and industrial chemicals  
RAPHAILIDOU 3  
177 78 TAYROS  
ATHENS - GREECE

To whom it may concern

OLYMPIC AIRWAYS states that since 1986 there is a satisfactory cooperation with EUROCHEM - marine and industrial chemicals - supplying us with all its products and especially with the following :

AC-55

EC-201

SARMOL 2070-NF,

KEM-SOLVE-1212,

KEM-SOLVE-2475,

SARMOL 4000,

PR-2025,

RR-1122,

HADISON.

A. DOUMAS

Manager Materials Management

\*\*\*\*\* PSDS GENERATED \*\*\*\*\*

<b>PROCESS SPECIFICATION DEPARTURE</b> <input checked="" type="checkbox"/> OPTION <input type="checkbox"/> REQUIREMENT <input type="checkbox"/> COMMITTED CHANGE	ORIG D. L. Thomas	PSD NUMBER 6-107	PROCESS SPEC NO. BAC5749
	SUPV T. A. Richardson	PAGE 1 of 1	
	MFG T. M. Hutchinson	PROCESS SPEC TITLE ALKALINE CLEANING	
	QUAL G. E. Delong		
REASON: Allow Hellenic Aerospace to use existing facilities	MAT'L T. M. Hutchinson		
	CUST. APPROVAL	23-JUL-1997	
	ENGR APPROVAL B. W. Smith	REL'S DATE	
SUBCONTRACTOR(S) AFFECTED Hellenic Aerospace	ON MODELS 757	MFG DEPTS OF DIV BELOW AFFECTED BCAG AND SUPPORTING	

13 JAN 1998

5

**MATERIALS CONTROL**

5.4

IMMERSION CLEANERS - LIGHT DUTY SOAK

13 JAN 1998

Add the following item:

x. Kern Kleen 41, Eurochem.

5.6

SPRAY CLEANERS - LIGHT DUTY

Add the following item:

x. Kern Kleen 41, Eurochem.

E.A.E.  
 ΤΕΧΝΙΚΗ ΕΙΣΑΓΟΓΗ  
 Αντίτυπο Νο: 10  
 Παραλαβή: 14 ΔΕΚ. 1998

8

**MANUFACTURING CONTROL**

8.2

ALKALINE CLEANING

Add the following items to Table I:

**TABLE I SELECTION AND CONTROL OF CLEANERS**

SECTION NUMBER	CLEANER	CONC OZ/GAL	TEMP DEG F	MAKEUP SECTION	METAL TO BE CLEANED						REMARKS
					Fe	Al	Ti	Mg	FL 1	FL 2	
IMMERSION CLEANERS - LIGHT DUTY SOAK											
5.4x.	Kern Kleen 41	6-8	Boiling	9.2	-	X	-	-	-	-	-
SPRAY CLEANERS - LIGHT DUTY											
5.6x.	Kern Kleen 41	6-8	Boiling	9.2	-	X	-	-	-	-	-

FL 1 Beryllium copper, cadmium, copper, lead, silver, solder, tin, zinc

FL 2 Chromium, cobalt, gold, molybdenum, nickel, stainless steel





الخطوط الجوية القطرية  
**QATAR AIRWAYS**  
Technical Services Directorate

## CERTIFICATE OF APPROVAL

This is to certify that:

M/s. Eurochem L.T.D  
Raphailidou  
17778 Tayros  
Athens-Greece

has been approved as "Aircraft Cleaning Compound Suppliers", as per the terms and conditions laid down overleaf, under the Authority Reference:

**QAC/QA/APPR/002**

This approval is valid until 15 February 1999, unless otherwise suspended, revoked or varied.



  
Authorisation

17-2-1997  
Date of Issue



الخطوط الجوية القطرية  
**QATAR AIRWAYS**

M/s. Eurochem L.T.D  
Raphailidou  
17778 Tayros  
Athens-Greece

Ref.: QAC/QAD/1702/YA02  
Date: 17 February 1997

Subject: **Certificate of Approval**

Please find attached the above noted certificate as an "Aircraft Cleaning Compound Suppliers" to Qatar Airways.

You are Kindly requested to acknowledge receipt of the same.

**Hamad Dafa' Mohammad**  
Manager, Quality Assurance

cc: Sr. Manager, Technical  
Manager, Material





DEPARTMENT OF THE NAVY  
NAVAL AIR SYSTEMS COMMAND  
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS  
47123 BUSE ROAD, UNIT #  
PATUXENT RIVER, MARYLAND 20670-1547

IN REPLY REFER TO

4123  
Ser 434100A/7.4526  
9 July 2001

Eurochem Ltd.  
Attn: Mr. N. Yiannoutsos  
3 Rafailidou Str.  
17778 Tavros,  
Athens, Greece

Dear Mr. Yiannoutsos:

Your product listed below has met the qualification requirements of MIL-PRF-85570C, Cleaning Compound, Aircraft, Exterior. Listing on the Qualified Product List (QPL) will appear as follows:

<u>Government Designation</u>	<u>Manufacturer's Designation</u>	<u>Test or Qualification Reference</u>	<u>Manufacturer's Name and Address</u>
Type I	Kleenol 2000 PRO	This letter	Eurochem Ltd. 3 Rafailidou Str. 17778 Tavros Athens, Greece
			<u>Plants</u> Eurochem Ltd. 3 Rafailidou Str. 17778 Tavros Athens, Greece

To ensure correct listing, please advise us within 14 days from the date of this letter of any discrepancy.

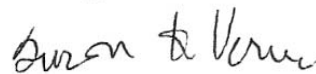
The following statements are binding upon the manufacturer per the Defense Standardization Manual 4120.3M:

- This listing does not guarantee acceptance of the product in any future purchase.
- This listing does not constitute a waiver of any requirements of the specification or of the provisions of any contract.
- Any use of such listing for publicity, advertising, or sales shall not state or imply that the product is the only one of that type so qualified, or that the Government in any way recommends or endorses the manufacturer's product. Violation is cause for removal of the product from the list by the Government activity concerned.
- This listing applies only to products produced in the plants specified in this letter of notification and is effective at 8:00 am local time as of the date of this letter. If extension of qualification to any of your other plants is desired, please request such extension through this office.
- This listing applies to amendments or revisions of the specification unless otherwise notified.

- f. This listing applies only to products identical to that qualified. There shall be no change in formulation or manufacturing procedure unless the material is re-examined for compliance with the requirements of the specification by the qualifying activity. Failure to notify the qualifying activity of a change in formulation is cause for removal from the QPL. The manufacturer is cautioned not to change type or grade of ingredients because of possible change in performance characteristics.
- g. To retain this listing, manufacturers must comply with retention of qualification requirements. Failure to comply will be sufficient cause for removal from the QPL.

For further information, please contact Dr. El Sayed Arafat at (301)342-8054 or Ms. Dayle Dierks at (301) 342-8058.

Sincerely,



SURESH K. VERMA  
Acting Head, Materials Protection Branch

Copy to:

DSCR (JDTA/Myers)  
NAWCAD LAKEHURST (Code 4.1.4.2B120-3)  
NADEP CHERRY POINT NC (Code 4.3.4)  
NADEP NORTH ISLAND CA (Code 4.3.4)  
NADEP JACKSONVILLE FL (Code 4.3.4)  
NAWCWD CHINALAKE CA (Code 4B2)  
AFRL/MLS-OLR (NCI)



DEPARTMENT OF THE NAVY

NAVAL AIR WARFARE CENTER

AIRCRAFT DIVISION

WARMINSTER, PENNSYLVANIA 18974-5000

4123

Ser 6062/244

27 May 1993

Mr. Theodoros Panou  
Eurochem LTD  
3, Rafailidou Str.  
177 78 Tavros  
Athens, Greece

Dear Mr. Panou:

Your product, listed below, has met the qualification requirements of specification MIL-C-43616, Cleaning Compound, Aircraft Surface.

Listing on the Qualified Products List (QPL) will appear as follows:

<u>Government Designation</u>	<u>Manufacturer's Designation</u>	<u>Test or Qualification Reference</u>	<u>Manufacturer's Name and Address</u>
Class 1	EC-201	This letter	Eurochem LTD 3, Rafailidou Str. 177 78 Tavros Athens, Greece
			<u>Plant</u> Same as above

Your product, company name and address, as indicated above, will be listed on the next issue of the QPL for the specification. To insure correct listing, please advise us within ten days from the date of this letter of any discrepancy.

The following statements are binding upon the manufacturer per the Defense Standardization Manual 4120.3M:

1. This listing does not guarantee acceptance of the product in any future purchase.
2. This listing does not constitute a waiver of any requirements of the specification or of the provisions of any contract.
3. Any use of such listing for publicity, advertising, or sales shall not state or imply that the product is the only product of that type so qualified, or that the Government in any way recommends or endorses the manufacturer's product. Violation is cause for removal of the product from the list by the Government activity concerned.

4. This listing applies only to products produced in the plants specified in this letter of notification and is effective at 8:00 a.m. local time as of the date of this letter. If extension of qualification to any of your other plants is desired, please request such extension through this office.

5. This listing applies to amendments or revisions of the specification unless otherwise notified.

6. This listing applies only to products identical to that qualified. There shall be no change in formulation or manufacturing procedure unless the material is re-examined for compliance with the requirements of the specification by the qualifying activity. Failure to notify the qualifying activity of a change in formulation is cause for removal from the QPL. The manufacturer is cautioned not to change type or grade of ingredients because of possible change in performance characteristics.

7. To retain this listing, manufacturers must comply with retention of qualification requirements. Failure to comply will be sufficient cause for removal from the QPL.

For further information, you may contact Mr. Walter Knight, at (215) 441-2189.

Sincerely,



I. S. SHAFER

Superintendent, Aerospace Materials Division  
Air Vehicle and Crew Systems Technology Department  
By direction of the Commanding Officer

Copy to:

NAVAIR (AIR-5304D2)

NAVAIRWARCENACDIVLKE (SR 32)

DGSC, Richmond, VA 23297

GSA/FSS, Ft. Worth, TX 76102





DEPARTMENT OF THE NAVY  
NAVAL AIR SYSTEMS COMMAND  
RADM WILLIAM A. MOFFETT BUILDING  
47123 BUSE ROAD, BLDG 2272  
PATUXENT RIVER, MARYLAND 20670-1547

IN REPLY REFER TO

4120  
Ser 434100A/7.4574  
08 June 2004

Eurochem S.A.  
Attn: N. Yiannoutsos  
3 Rafailidou Str., Tavros  
177 78 Athens, Greece

Dear Mr. Yiannoutsos:

Your product CARB-OVER 154 has met the current qualification requirements of specification SAE-AMS-19853, Carbon Removing Compound (for Use in Agitated Tank). Listing on the Qualified Products List (QPL) will appear as indicated below.

Government Designation	Manufacturer's Designation	Test or Qualification Reference	Manufacturer's Name and Address
SAE-AMS-C-19853	CAR-OVER 154	This letter	Eurochem S.A. 3 Rafailidou Str., Tavros 177 78 Athens, Greece  Plant: Same

Your product, company name and address, as indicated above, will be listed on the next issue of the QPL for the specification. To ensure correct listing, please advise us within 14 days from the date of this letter of any discrepancy.

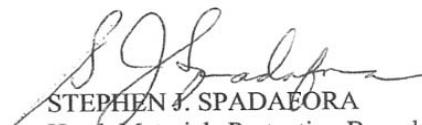
The following conditions are binding upon the manufacturer per the DoD 4120.24-M, Defense Standardization Program (DSP) Policies and Procedures:

- Such listing does not guarantee acceptance of the product in any future purchase.
- Such listing does not constitute a waiver of any requirements of the specification or of the provisions of any contract.
- Any use of such listing for publicity, advertising, or sales shall not state or imply that the product is the only one of that type so qualified, or that the Government in any way recommends or endorses the manufacturer's product in preference to other qualified products. Violation is cause for removal of the product from the list by the Qualifying Activity.
- This listing applies only to products produced in the plant(s) specified in this letter of notification and is effective at 8:00 a.m. (local time of the Qualifying Activity) as of the date of this letter. If extension of qualification to any of your other plants is desired, please request such extension through this office.
- Such listing applies to amendments or revisions of the specification, unless otherwise notified.

- f. Such listing applies only to products identical to that qualified. The Qualifying Activity must be advised in advance of any intended change to the product and must be provided with a complete description of the change. Failure to notify the Qualifying Activity of any change is cause for removal from the listing regardless of the extent of the change.
- g. Manufacturers must comply with retention of qualification to retain the listing. Failure to comply will be sufficient cause for removal from the listing.

For further information, you may contact Ms. Dayle Dierks at (301) 342-8058.

Sincerely,

  
STEPHEN J. SPADAEORA  
Head, Materials Protection Branch

Copy to:  
DSCR (JDTA/Myers)  
NAWCAD LAKEHURST (Code 4.1.4.2 B120-3)  
NADEP CHERRY POINT NC (Code 4.3.4)  
NADEP NORTH ISLAND CA (Code 4.3.4)  
NADEP JACKSONVILLE FL (Code 4.3.4)  
NAWCWD CHINALAKE CA (Code 4.7.6.5)  
AFRL/MLS-OLR (NCI)





REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
U.S. ARMY RESEARCH, DEVELOPMENT, AND ENGINEERING COMMAND  
6501 E. ELEVEN MILE ROAD  
WARREN, MICHIGAN 48397-5000

February 10, 2011

Fuels and Lubricants Technology Team

Mr. N. Yiannoutsos  
EUROCHEM S.A.  
3 Rafaildou Street  
Tavros 177 78 Athens  
Greece

Dear Mr. Yiannoutsos:

It is advised that your product:

Manufacturer's Designation: Solvent-680 Type II  
Qualification Number: DS-0016  
Expiration Date: February 10, 2016  
Specification: MIL-PRF-680C, Type II

has been tested in accordance with the above specification. Results of the tests showed that the material complied with the requirements of the specification. Accordingly, this product is approved for inclusion in the Qualified Products Database (QPD) 680. There shall be no change in formulation or manufacturing procedure unless the material is re-examined for compliance with the requirements of the specification by the qualifying agency. The manufacturer is cautioned not to change type of ingredients because of possible change in the performance characteristics.

This notice of qualification and listing in the Qualified Products List does not guarantee acceptance of the product in any future purchase nor constitute a waiver of the requirements established by the Defense Standardization policies, procedures, and instructions.

Sincerely,

Dr. In-Sik Rhee  
Fuels and Lubricants Technology Team  
TARDEC Petroleum and Water Business Area



**ΠΡΟΣ:** EUROCHEM S.A  
(Ραφαηλίδου 4, 177 78, Αθήνα  
τηλ. 210 4836321-7)

**ΚΟΙΝ:** ΓΔΑΕΕ/ΔΑΩ&ΔΠ/ΤΜ.ΚΩΔ/ΣΗΣ

ΥΠΟΥΡΓΕΙΟ ΕΘΝΙΚΗΣ ΑΜΥΝΑΣ  
ΓΕΝΙΚΗ ΔΙΕΥΘΥΝΣΗ ΑΜΥΝΤΙΚΩΝ  
ΕΞΟΠΛΙΣΜΩΝ & ΕΠΕΝΔΥΣΕΩΝ  
ΔΙΕΥΘΥΝΣΗ ΑΝΤΙΣΤΑΘΜΙΣΤΙΚΩΝ  
ΩΦΕΛΗΜΑΤΩΝ & ΔΙΑΣΦΑΛΙΣΗΣ  
ΠΟΙΟΤΗΤΑΣ  
ΤΜΗΜΑ ΚΩΔΙΚΟΠΟΙΗΣΗΣ  
Τηλ.: 7466281  
Φ.081.1/134/71998  
Σ. 5622  
Αθήνα, 23 Δεκ. 2009

**ΘΕΜΑ :** Κωδικός κατά NATO Κατασκευαστή (NCAGE)

**ΣΧΕΤ. :** Η από 21 Δεκ. 2009 επιστολή της εταιρείας EUROCHEM S.A.

Σας πληροφορούμε σε απάντηση σχετικού, ότι σύμφωνα με τα τηρούμενα στοιχεία στην Βάση Δεδομένων του Τμήματος Κωδικοποίησης, έχει αποδοθεί στην εταιρεία σας ο Κωδικός Κατασκευαστή κατά NATO G1673.

Νικόλαος Γανώσης  
Αναπληρωτής Γενικός Διευθυντής





18/04/97

06131

GDE DPMY RAB 8232371

001

ΧΕΙΡΩΤΗΣ	ΑΝΤΙΣΤΡΟΦΗ	ΑΝΤΙΣΤΡΟΦΗ	ΑΝΤΙΣΤΡΟΦΗ	ΑΝΤΙΣΤΡΟΦΗ	ΑΝΤΙΣΤΡΟΦΗ

Μαργαρίτα  
FAXI 3422688

NATO CODIFICATION SYSTEM  
REQUEST FOR NATO SUPPLY  
CODE FOR MANUFACTURE

ΓΡΑΦΕΙΟ ΚΑΤΑΣΚΕΥΑΣΤΩΝ ΥΛΙΚΟΥ  
ΑΙΘΗΝ ΓΙΑ ΑΝΟΝΟΜΗ ΚΑΤΑΣΚΕΥΑΣΤΟΥ  
FAX 8232371

ΜΕΡΟΣ Α

1	ΑΠΟ/FROM	2	ΗΜΕΡΟΜΗΝΙΑ/DATE	3	ΠΡΟΣ/TO
	EUROCHCM ΕΠΕ		18-4-1997		ΓΑΕ/ΔΠΥΥ/Ρ4Β

4	<input checked="" type="checkbox"/> ΚΑΤΑΣΚΕΥΑΣΤΗΣ MANUFACTURE	<input type="checkbox"/> ΠΡΟΜΗΘΕΥΤΗΣ AGENT
---	--	---

5	ΕΠΩΝΥΜΙΑ/NAME	EUROCHCM ΕΠΕ
	ΟΔΟΣ/STREET	ΡΑΦΑΗΛΙΔΟΥ 3
	ΠΟΛΙΣ/CITY	ΤΑΥΡΟΣ - ΑΘΗΝΑ
	ΝΟΜΟΣ/STATE	ΑΤΤΙΚΗΣ
	T.K.	177.28
	ΤΗΛ.	3422901-2
	FAX.	3422688

6	ΕΠΩΝΥΜΙΑ/ΚΩΔΙΚΟΣ TYPICAL REFERENCE NUMBERS	
---	---	--

7	ΑΝΤΙΠΡΟΣΩΠΕΥΤΙΚΑ ΠΑΡΑΓΟΜΕΝΑ ΠΡΟΪΟΝΤΑ ΚΑΙ ΚΑΡΔΙΚΟΣ ΑΥΤΩΝ TYPICAL REFERENCE NUMBERS ΑΠΟΧΡΕΤΙΚΑ - CARBON REMOVALS - ΔΙΑΔΥΤΑ ΧΡΕΜΑΤΑ - ΕΙΣΗΛΕΥΣΗ ΣΕΒΣΥ - ΚΑΘΑΡΙΣΤΙΚΑ ΑΕΡΙΩΝ
---	---

8	ΠΑΡΑΤΗΡΗΣΕΙΣ	9	ΥΠΟΓΡΑΦΗ/SIG
			ΕΥΡΟΧΕΜ ΕΠΕ ΠΑΡΑΧΑΛΩΣ Σ. ΤΑΥΡΟΣ ΑΦΜ: 95206001

ΜΕΡΟΣ Β

1	ΑΠΟ/FROM	2	ΗΜΕΡΟΜΗΝΙΑ/DATE	3	ΠΡΟΣ/TO
	ΓΑΕ/ΔΠΥΥ/Ρ4Β		21-4-97		EUROCHCM ΕΠΕ

4	ΑΠΟΛΟΓΕΙΣ ΚΩΔ/ΚΩΔ ΚΑΤ/ΤΟΥ	5	ΑΝΑΓΕΡΦΘΕΙΣΑ ΕΠΩΝ/ΝΙΑ -ΔΙΕΥΘ/ΝΣΗ REVISED NAME AND ADDRESS AS INDICATE.
	G 1 6 7 3		

6	ΣΗΜΕΙΩΣΕΙΣ/REMARKS

NATO FORM AC/135 No 2

ΥΕΘΑ/ΓΑΕ/ΔΠΥΥ
Χρονολογία Βισοβού 22/4/97
Αριθ. Πρωτοκόλλου 1/1/700
>> Συντηρημένο
Αποδοχή 3/1/97



846/97