ARDROX®

Ardrox 1900B

Multi-purpose aircraft cleaner

Scope

ARDROX 1900B is a heavy duty, thixotropic, alkaline cleaner for the exterior and interior cleaning of aircraft and ground handling equipment. It can also be used as a decarboniser for engine and component cleaning. It is pleasantly scented and all the surfactants employed in the formulation are completely biodegradable.

Chemicals required

ARDROX 1900B

Testing chemicals required

Para-nitro phenol indicator

Testing solution No.9 (0.1N sulphuric acid solution)

Method of use

A) Aircraft exterior washing

1) General Wet Washing

Mix 1 part of ARDROX 1900B with 5 to 10 parts of water and spray on to the surface. Agitate with brushes, pads or mops if necessary, and then rinse with water.

B) Heavy duty aircraft exterior cleaner

2) Gear Well and Flap Cleaning

For heavy-duty cleaning use ARDROX 1900B as received, dilution with water will progressively destroy the thixotropic properties. Spray on a heavy uniform film of ARDROX 1900B and allow 5 to 10 minutes dwell time. Agitate with brushes, pads or mops if necessary then rinse with water.

3) Nacelles, Exhaust Tracks, Thrust Reverser Cleaning

Same procedure as (2) above.

4) Dry Washing

Fog on a light film of ARDROX 1900B or apply with pad or mop head. Agitate as necessary, mop dry with clean dry aircraft mops.

C) Aircraft interior cleaner

5) Interior Cleaning

Mix 1 part of ARDROX 1900B with 10 to 20 parts of water. Apply the solution by spray, rag or mop head; rub the area to be cleaned then wipe dry with a clean rag or mop head.

D) Decarboniser/degreaser

6) ARDROX 1900B can be used either neat or diluted to 10 - 50% with water in an immersion tank or a spray washing machine. The product may be heated to 65°C if necessary. Usually a concentration of 50% ARDROX 1900B is used for immersion systems and 10% ARDROX 1900B for spray applications. Trials need to be conducted to find the most suitable conditions. Once the contaminants have been removed the components should be rinsed with water.

Method of control

A method of control is applicable when using ARDROX 1900B as an immersion decarboniser.

Restore the volume of the tank to its original level, if necessary, by adding water. Thoroughly mix and take a sample of 50-100ml. After allowing to cool to ambient, pipette 25ml into a conical flask, add about 100ml of distilled water and 5-10 drops of para-nitro phenol indicator. Titrate against Testing solution No.9 to a clear colourless endpoint. Record the volume as (V)ml.

Alternatively add 25ml of tank solution to a beaker with 100ml of distilled water. Titrate with Testing solution No.9 to pH 5.5. Record the volume as (V)ml.

Measured strength (vol% ARDROX 1900B) = V x 1.9

E.g. a titre of 10.5ml corresponds to a 20% solution of ARDROX 1900B.

For each percentage point that the strength is below that expected, add 10 litre of ARDROX 1900B for each 1000 litre of solution.

Effects on materials

ARDROX 1900B meets the stringent requirements of Boeing D6-17487 and McDonnell Douglas CSD No. 1 with respect to corrosion, hydrogen embrittlement and effect on acrylic plastics and painted surfaces.

Technical information

Appearance:	White, viscous liquid.
Density:	1.02 g/ml at 20°C
pH (as received):	12.5
pH (25% dilution):	11.8

Equipment materials

Equipment/tanks should be constructed of 316 or 320 stainless steel.

Safety guidance

Before operating the process described it is important that this complete document, together with any relevant Safety Data sheets, be read and understood.

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General information

Chemetall PLC supplies a wide range of chemical products and associated equipment for cleaning, sanitising, descaling, paint and carbon removal, metal protection and non-destructive testing. Sales Executives are available to advise on specific problems and applications.

Labour and environmental protection

All local and national regulations on the transport, storage, use and waste treatment of chemicals in concentrated or diluted form and as working solutions must be obeyed.

Further specific information on the products can be found in the EC Safety Data Sheets supplied. The user should also pay strict attention to information and hazard symbols shown on product labels.

Waste disposal

All waste waters must be treated in accordance with national legislation and local regulations prior to discharge to the sewer.

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