

Scope

ARDROX 6025 is a liquid concentrate of surfactants, alkali builders, solvents and corrosion inhibitors.

ARDROX 6025 is primarily intended for cleaning the exterior surfaces of aircraft with and without foaming. It is also suitable for use as a primary cleaner in aero engine overhaul processes.

ARDROX 6025 may also be used for the removal of light grease and oils, sooty deposits and other impinged soils from a wide variety of metallic and non-metallic surfaces.

Chemicals required

ARDROX 6025

Testing chemicals required

Indicator solution No.10 (screened methyl orange)

Testing solution No.9 (0.1N sulphuric acid)

Method of use

For most purposes ARDROX 6025 is diluted with water, the level of dilution being in accordance with the application and the degree of soiling. The following dilutions (by volume) are a guide only:

Aircraft Exterior Cleaning

1 part ARDROX 6025 plus 9 parts water.

Primary Cleaning

From 3 parts ARDROX 6025 plus 7 parts water to 1 part ARDROX 6025 plus 1 part water.

Partially carbonised deposits

Use 1 part ARDROX 6025, 1 part water plus 3 parts kerosene and agitate before use.

When ARDROX 6025 is used for cleaning the exterior surfaces of aircraft it can be very effectively and economically applied as foam using a pressure pot type foam unit. The product can also be applied by spray, brush or swab.

For primary cleaning ARDROX 6025 is normally used at 35 to 40°C by tank immersion.

For advice concerning application equipment contact your local Chemetall Aerospace Technologies Representative.

Method of control

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 of the tank solution into a conical flask. Add 50ml distilled water and add 3-6 drops of Indicator No.10. Titrate with the Testing solution No.9 until the colour changes to violet. Note the volume (V)ml of Testing solution No.9 used.

The strength of the bath is obtained from the following equation:

$$\text{Strength (\% ARDROX 6025)} = V \times 0.847$$

For each percentage point that the strength is low, add 1.0 litre of ARDROX 6025 for each 100 litre of bath solution.

On a highly contaminated solution, the indicator colour change may be difficult to see. In this case it is recommended that the titrations are carried out using a pH meter, taking the end point within the pH range 2.8 – 3.6.

An ARDROX 6025 solution made up at 10 vol% will give titrations of ~12ml. In cases where the expected concentration is much higher than 10%, inconveniently large titrations can be avoided by taking a smaller sample than 25ml. and calculating the value for 25ml. before applying the above equation.

Effects on materials

When ARDROX 6025 is used in the prescribed manner no significant corrosion is likely to be encountered on aluminium, magnesium, steel, copper and cadmium plating.

It has no effect on good quality paint finishes and will not craze polymethylmethacrylate plastic (e.g. "Perspex" or "Plexiglas").

Technical information

Appearance:	Clear, green, mobile liquid.
Density:	1.05 g/ml at 20°C.
Flash Point:	65°C minimum (Pensky Martin Closed Cup).

At normal use dilutions, ARDROX 6025 is non-flammable.

These are typical values only and do not constitute a specification.

Store in a cool place, with protection from freezing conditions.

Equipment materials

Mild steel or stainless steel (Grade 304 or equivalent) are suitable material for tank construction.

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.

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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