

# Ardrox<sup>®</sup> 3705

## AQUEOUS CORROSION INHIBITOR

### 1 Description

ARDROX 3705 is a water based inhibitor which has been specially formulated for addition to rinse water tanks to stop flash rusting of ferrous components. When added to rinse waters ARDROX 3705 can give protection to ferrous components under good indoor storage conditions for up to eight weeks.

### 2 Physical and chemical properties

Property	Typical Value	Unit
Appearance	Clear, pale straw coloured liquid.	-
Density	1.08	g/ml

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

### 3 Method of use

ARDROX 3705 is used at 1 - 4% v/v in water i.e. 10 - 40 litres per 1000 litres of washing solution at temperatures ranging from ambient to 90 °C. Components are immersed in the working solution for up to two minutes and then allowed to air dry.

### 4 Effects on materials

When used in the prescribed manner ARDROX 3705 will have no significant effect on steel, aluminum, magnesium, cadmium plated steel, titanium and brass. Equipment/tanks should be constructed of 316 or 320 stainless steel or mild steel.

### 5 Shelf life, storage and disposal

Please refer to the corresponding Material Safety Data Sheets for details on shelf life, storage and disposal.

### 6 Labor and environmental protection

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

## **7 General Information**

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

## Method of control

### Required testing chemicals:

- Indicator solution No.6 (bromocresol green)
- Testing solution No.9 (0.1N sulphuric acid solution)

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 an Erlenmeyer flask and add 10 drops of Indicator solution No.6. Titrate against Testing solution No.9 to a colour change from blue to yellow. Record the volume used as (V)ml. The bath strength is calculated as follows:

Strength (% ARDROX 3705) = V/9

For each percentage point that the strength is low, add 1.0 litre of ARDROX 3705 for each 100 litre of bath solution.

The above details have been compiled to the best of our knowledge on the basis of tests and research work and with regard to the current state of our practical experience. This technical product information is non-binding. No liabilities or guarantees deriving from or in connection with this leaflet can be imputed to us. Statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. The reproduction of any or all of the information contained in this leaflet is expressly forbidden without Chemetall's prior written consent.

**Headquarters and Regional Head Office**  
**Europe, Middle East, Africa,**  
**South America**  
Chemetall GmbH  
Trakehner Straße 3  
60487 Frankfurt am Main  
Germany  
Tel: +49 (0) 69 7165-0  
surfacetreatment@chemetall.com

**Regional Head Office**  
**North America**  
Chemetall US, Inc.  
675 Central Avenue  
New Providence, NJ 07974  
USA  
Tel: +1-908-464-6900  
chemetallamericas@chemetall.com

**Regional Head Office**  
**Asia-Pacific**  
Chemetall Asia Pte Ltd.  
12 Loyang Crescent  
Singapur 508980  
Tel: +65 6885 7900  
cm.asia@chemetall.com

[www.Chemetall.com](http://www.Chemetall.com)