



**AES ARABIA LTD**

Environmental & Process Engineering



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## **PRODUCT DATA**

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### **AES-A-351 COOLING WATER SCALE INHIBITOR**

#### **DESCRIPTION AND USE**

AES-A-351 is designed as scale inhibitor for open, recirculating cooling water systems constructed of multiple metallurgy. This product contains a synergistic blend of organophosphonate azole yellow metal corrosion inhibitor and the specific multi functional polymeric dispersant utilized, maintain system cleanliness to assure optimum scale control for systems operated with makeup water containing moderate to high concentrations of hardness and alkalinity.

AES-A-351 is compatible with all products including chlorine at use level concentration.

#### **CHEMICAL FEEDING AND CONTROL**

AES-A-351 is normally fed continuously to the systems being treated. However, shot feeding may be satisfactory in some circumstances. The product may either be fed neat directly from the shipping container or mixed in a chemical feed tank. Normal materials of construction are satisfactory for the chemical feed system: however, copper, copper alloys and aluminum metallurgy must be avoided.

AES-A-351 is normally controlled by an orthophosphate test utilizing a simple color comparator for measurement. The specific control ranges vary depending upon system conditions and will be specified by the technical representative servicing the facility.

#### **TYPICAL PROPERTIES**

Appearance: Yellow or Amber  
Liquid

Odor: Characteristic

Flash Point: None

Specific gravity: 1.05 to 1.28

pH 1% solution in R.O water : <5.0

Freeze Point <-5°C(24°F)

Solubility: Soluble in water at all proportions

(All values approximate)

#### **SAFETY AND HANDLING**

AES-A-351 may be toxic by ingestion. Do not take internally. If ingested, drink at least two glasses of water and get medical attention. Contact with eyes causes severe irritation or burns and possible blindness. If eyes are contacted, immediately flush with clear water for 15 minutes and get medical attention. For skin contact, wash with soap and water. For more information, the Material Safety Data Sheet is available on request.

#### **PACKAGING**

AES-A-351 is packaged in 200 and 25 liter (nominal volume) non-returnable plastic drums.

# AES TREATMENT PROGRAMS & SERVICES

## Cooling Water Treatment Programs

Corrosion Inhibitors  
Antiscalants & Antifoulants  
Biocides  
Antifoams

## Boiler Water Treatment Programs

Oxygen Scavengers  
Corrosion Inhibitors ( Pre-Boiler, Boiler and After  
Boiler)  
Deposit Inhibitors ( Sludge Conditioners)  
Antifoams  
Alkalinity Builders

## Potable Water Treatment Programs

Corrosion Inhibitors  
Deposit/ Scale Inhibitors  
Disinfectants

## Fuel Treatment (Solid & Liquid)

Deposit/ Corrosion Inhibitors  
Combustion Catalysts

## Coagulants & Flocculants

Organic & Inorganic

## Odor Control Programs

Masking Agents  
Reactive Odor Control  
Enzymes

## Hard Surface Cleaners

General Purpose Cleaners  
Descalers  
Neutralizers

## Brewery & Bottling Plants

Pasteurizers  
Bottle Washers  
Conveyer Chain Lubricants

## Metal Treatment Chemicals

Cutting Lubricants  
Degreasers  
Passivators  
Phosphatizing Chemicals  
Electroplating Chemicals

## R.O. Water Treatment

Scale Inhibitors  
Membrane Cleaning Chemicals  
ANSI/ NSF Approved Antiscalants

## Thermal Desalination Treatment

Scale and Corrosion Inhibitors  
Antifoams  
Descalers

## Steam & Condensate Programs

Corrosion Control  
USDA/ FDA Approved Additives

## Raw Water & Wastewater Programs

Coagulants      Odor control  
Flocculants      Enzymes  
Disinfectants    Bacterial Spores  
Antifoams      Emulsion Breakers

## Process Treatment Programs

Specialty Chemical Additives

## Commercial Laundry Chemicals

Built Detergents  
Emulsifiers  
Fabric Softeners  
Peroxide Bleach  
Chlorine Bleach  
Scoring Agents

## Services

Technical & Engineering Consultations  
Analytical Services  
Ion Exchange Resins Evaluation  
Reverse Osmosis Cleaning

## Equipment Supply

Water & Wastewater Treatment Plants  
Filters, Pumps  
Tanks  
Chemical Feed Systems  
PH Controllers  
Blow down Controllers  
Automatic Control Systems  
SCADA

Manufactured in the Kingdom of Saudi Arabia by :

The logo for AES, featuring the letters 'AES' in a bold, italicized, red font with a white outline.

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