

## **AUTOMATE™ Yellow HF**

Liquid Concentrated Solvent Soluble Dye

### **Description**

AUTOMATE™ Yellow HF is a single phase, liquid concentrated solvent soluble dye and provided in a high flash, severely hydrotreated naphthenic solvent system. The solvent is used in the product as a viscosity depressant and standardizing agent.

The product has been found to be completely miscible in all petroleum fuels, lubricating oils and many other related hydrocarbon solvents, including grease and hydraulic oils. It has found use in a variety of other applications including the coloration of fuels, solvents and explosives. It can be mixed with other colors in the AUTOMATE product line to create a limitless number of shades.

The product is available in bung-type nonreturnable steel containers.

## Recommended Dosage

The following recommendations are provided as a starting point for typical applications. Actual dosage will depend on desired color strength as well as background color of the base material.

 Fuels
 5 to 20 mg/l

 Lubricants
 50 to 200 mg/l

 Greases
 500 to 2000 mg/l

# Typical Physical Properties

#### **AUTOMATE™ Yellow HF**

Dye Type Azo
Specific Gravity 0.95
Density (lbs/Gal) 7.8

Flash Point (ASTM D-3278) >94°C, >201°F

These are typical properties, not to be construed as specifications.

## Product Specifications

### **AUTOMATE™ Yellow HF**

 $\begin{array}{lll} \mbox{Color Strength} & 100 \pm 5\% \\ \mbox{Absorbance (at 20 mg/l conc.)} & 0.538 \mbox{ AU } \pm 5\% \\ \mbox{Wavelength Measured} & 398 \mbox{ nM} \\ \end{array}$ 

Color Shade (Chromaticity Values)

 $\begin{array}{ccc} \text{X Value} & 0.136 - 0.166 \\ \text{Y Value} & -0.034 - 0.058 \\ \text{Insolubles} & 0.5\% \text{ Max} \end{array}$ 

(Filter Method)

Water 0.4% Max

(Karl Fisher Method)



### **Handling Precautions**

AUTOMATE™ Yellow HF has been formulated to accommodate handling at temperatures down to 0°C. To ensure pumpability at temperatures below this we recommend diluting the product with an aromatic solvent.

Any piping, fittings, valves, filters, metering pumps, etc. should have wetted parts compatible with that of a severely hydrotreated naphthenic solvent system.

Before using this product, consult the Material Safety Data Sheet (MSDS) for details on product hazards, recommended handling precautions and product storage.

**CAUTION!** Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

#### **Storage**

The recommended storage temperature for this material is between 10 and 40°C. Exposure to excessively low temperatures should be avoided as it may cause increased levels of precipitation. The product should also be stored away from excessive heat sources or ignition sources.

If product containers are kept sealed and dry and extreme temperatures are avoided the shelf life of the material is greater than 3 years. The container should be tightly closed when not in use in order to prevent solvent evaporation.

### **Product Stewardship**

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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#### Contact:

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