AUTOMATE™ Red IKHF

Liquid Concentrated Solvent Soluble Dye

Description

AUTOMATE™ Red IKHF is a single phase, liquid concentrated solvent soluble dye containing C.I. Solvent Red 164 and provided in a high flash, severely hydrotreated aromatic 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. Common applications include the coloration of lubricants such as Automatic Transmission fluids. It has also 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™ Red IKHF

Dye Type	Azo
Specific Gravity	0.96
Density (lbs/Gal)	7.9
Brookfield Viscosity (at 25°C)	50 to 150 cps
Flash Point (ASTM D-3278)	>93°C, >200°F
Pour Point (ASTM D-97-87)	<-36°C, <-32°F

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

®™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Product Specifications

AUTOMATE™ Red IKHF	
Color Strength	100 ± 5%
Absorbance (at 32 mg/l conc.)	0.580 AU ± 5%
Wavelength Measured	515 nM
Color Shade (Chromaticity Values)	
X Value	0.172 – 0.180
Y Value	0.371 – 0.395
Insolubles (Filter Method)	0.2% Max
Water (Karl Fisher Method)	0.4% Max

Handling Precautions

AUTOMATE™ Red IKHF 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 Safety Data Sheet (SDS) for details on product hazards, first aid measures, recommended handling precautions, recommended personal protection equipment 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.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

®™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

Contact:
North America: +1 (800) 447-4369
Latin America: +55 (115) 188-9000
Europe: +8 (003) 694-6367
Asia-Pacific: +8 (007) 776-7776
http://www.dow.com/

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

®™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow