



Technical Datasheet

Shell Chemicals

23-Nov-2012

Product Name

Ethyl PROXITOL Acetate

Product Code

U5149

Product Category

Glycol Ether Acetates

CAS Registry Number

54839-24-6

Synonym(s)

EPA; Propylene glycol mono ethyl ether acetate; 1-Ethoxy-2-propanol acetate

Description

Shell Chemicals has the following Propylene Oxide derivatives commercially available on a global basis. These are the 'Methyl PROXITOL Glycol Ether (PM)', 'Methyl DIPROXITOL Glycol Ether (DPM)', 'Methyl PROXITOL Glycol Ether Acetate (MPA)', Ethyl PROXITOL. The propylene glycol ethers provide alternatives to the ethers of ethylene glycols, which are under regulatory pressures around the world.

Now Shell Chemicals is bringing an additional glycol ether to market, Ethyl PROXITOL Glycol Ether Acetate (EPA), which will allow an improved selection of optimum evaporation characteristics for each application. EPA can be used in same applications as other glycol ether derivatives but has particularly good properties for specific applications such as Paints for automotive refinish, Electronic cleaning, and Photoresist removers. Due to its miscibility with polar and non-polar substances, EPA can be used as coupling and coalescing agent in water-based paint formulations. Its low surface tension, low conductivity and compatibility with electrical components and circuit boards makes EPA especially suitable for cleaning applications in the electronic industry. EPA its mild odor, low skin irritancy, low toxicity and relatively high flashpoint will ensure improved worker, and user comfort, and safety.

EPA is comparable to MPA in terms of physical and solvency properties. Few key differences, EPA:

1. Has a slightly longer evaporation time.
2. Has a higher flash point, and is therefore easier to handle.
3. Has a higher boiling point and lower vapour pressure.
4. Has a lower surface tension.

Typical Properties

| Property | Unit | Method | Value |
|-------------------------------------|---------|------------|------------------|
| Purity | % m/m | DIN 55689 | 99.5 |
| Water | % m/m | ASTM D1364 | 0.02 |
| Appearance | - | ASTM D4176 | Clear and Bright |
| Density @20°C | kg/l | ASTM D4052 | 0.94 |
| Color | Pt-Co | ASTM D1209 | < 5 |
| Boiling Point | °C | - | 159 |
| Evaporation Time (nBuAc=470sec) | seconds | ASTM D3539 | 2570 |
| Relative Evaporation Rate (nBuAc=1) | - | ASTM D3539 | 0.18 |
| Vapor Pressure @25°C | kPa | Calculated | 0.2 |
| Flash Point | °C | IP 170 | 51 |
| Molecular Weight | g/mol | - | 146 |

Test Methods

Copies of copyrighted test methods can be obtained from the issuing organisations:

American Society for Testing and Materials (ASTM) : www.astm.org
 Energy Institute (IP) : www.energyinst.org.uk
 Deutsches Institut für Normung (DIN) : www.din.de

N.B: For routine quality control local test methods may be applied. Such methods have been validated against those mentioned in this datasheet.

Applications

Paints & Coatings -

Automotive, Industrial Maintenance, Coil, Appliance & Equipment, Lacquer & Stains, Architectural, Marine, Aerospace, Plastic Primer, Resin Formulations, Colorants, Thinners, Specialty Paints

Cleaners & Inks -

All-Purpose, Glass, Oven, industrial, household, Gravure, Flexographic, Screen Printing, Offset Printing

Electronics -

Copper clad Laminating, Laminates, Photoresistors

Other -

Adhesives, Intermediates, Fuel Additives, Pharmaceuticals, Cosmetics, Industrial Processes, Oil Field Chemicals, Mining Chemicals, Agricultural Chemicals, Textile & Leather Dyes

Hazard Information

For detailed Hazard Information please refer to the Material Safety Data Sheet on www.shell.com/chemicals

Storage and Handling

Provided proper storage and handling precautions are taken we would expect Ethyl PROXITOL Acetate to be technically stable for at least 12 months. For detailed advice on Storage and Handling please refer to the Material Safety Data Sheet on www.shell.com

Trademark

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Warranty

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