



Glycol Ethers for Coil Coatings

Coil coating is a process for applying a continuous protective finish to metal rolled in large coils. The metal may be steel, aluminum, or tin sheet delivered in coils by the manufacturer to a coating operation. The metal is uncoiled, coated by rollers, dried in ovens at temperatures ranging from 175°F to 500°F, and then recoiled.

Coils can range up to six feet in width and move along a paint line at speeds up to 800 feet per minute while a coating thickness from 0.1 to 8.0 mils is applied.

Typically, coil coating systems are solventbased, low-solids systems. However, highersolids systems are gaining more use. Resin types used in coil coatings include acrylic, polyester, and epoxy.

Due to the very high oven temperatures encountered in the curing of coil coatings, solvents with high boiling points are utilized. Several DOW glycol ether products meet this requirement; DOWANOL* DPM, TPM, PMA, DPMA, Butyl CELLOSOLVE.™, Butyl CARBITOL™, and Methyl CARBITOL™. These solvents also provide a broad range of evaporation rates, high dilution ratios, and excellent solvency.

Typically, coil coating lines incorporate incineration as a means of reducing solvent emissions while utilizing the fuel value of the solvents to maintain high oven temperatures. DOW glycol ether products have relatively high BTU values.