



## Glycol Ethers for Jet Fuel Anti-Icing Additive

DOWANOL\* glycol ethers are used as additives to jet fuel to prevent ice buildup in fuel lines and to inhibit growth of bacteria in fuel tanks.

Because of its high flash point, DOWANOL DM glycol ether has approval for use in both Jet Propulsion 5 (J.P.5) jet fuel for Navy aircraft (Military specification MIL-I-85470 (B)) and in the (J.P.4) Jet Fuels, for use by the Air force. In these jet fuels it is used at 0.08 - 0.15% by volume.

For DOWANOL DM glycol ether to function as a deicing additive it must be soluble in both the fuel and water. When water contaminates the fuel the additive must partition from the fuel to the water phase to lower the water's freeze point and inhibit ice formation.

These additives are primarily used in fuel for military and some private aircraft such as corporate jets. Commercial aircraft may not need fuel with an antiicing additive, if the fuel lines are equipped with heat tracers.