Product Data Sheet

Ethylene Glycol
Antifreeze & Coolant

DESCRIPTION

Nemco Ethylene Glycol Antifreeze & Coolant is a clear, untreated product and one of the most common fluid mediums used in convective heating and cooling applications. For additional protection from rust and corrosion, please refer to our Thermal Charge® EG and Nemco SR-1 HTF Product Data Sheet. In automotive service, ethylene glycol based fluids keep vehicle engines from freezing in the winter, and acts as a coolant to reduce overheating in the summer.

Ethylene glycol is also used in many commercial applications, including coolants for gas compressors, heating, ventilating and air-conditioning systems, and ice skating rinks.

In combination with water, ethylene glycol provides a wide temperature range of service, providing low temperature freeze protection as well as higher boiling points for extended range of operation. Ethylene glycol mixes completely with water, and the mixture can be adjusted to meet the required temperature range of service, from -53°C (-63°F) to 160°C (325°F).

Applications

- Heat transfer agent for boiler systems
- Organic synthesis feedstock
- Antifreeze solutions
- Solvent for fats, oils, waxes, etc.
- Coolant in refrigeration systems
- Plasticizer
- Bactericide
- Textile conditioner
- Emulsifier
- Anti-caking agent
- Preservative

Notes

- For the applications above, additional additives may be required for optimum performance.
- If there is a risk of fluid leakage to potable water or food processing systems, consider use of propylene glycol based fluids, which offer similar heat transfer performance with non-toxic properties.

Typical characteristics – Ethylene Glycol Antifreeze

Test	Performance		
	Pure	50/50	60/40
Appearance / colour	Clear		
Specific gravity, 15.6°C (60°F)	1.115	1.082	1.065
Freeze point, °C (°F)	-12.5 (9.5)	-37 (-35)	-53 (-63)
Boiling point, °C	193-204		
Total glycol (% wt), min	100	50	60

Physical characteristics shown in the table are typical and may vary slightly.