The Chemical Properties

SUBSTANCE	TUNGSTEN REACTION
Air or Oxygen	Room temperature - no action 400ºC - superficial oxidation 1400ºC - continuous oxidation
Ammonia Gas	None
Argon	None
Bromide Vapor	Reaction at bright red heat
Carbon Dioxide	1200ºC - oxidation
Carbon Monoxide	1400ºC - Carbide
Chlorine	Reaction above 300ºC
Fluorine	Reaction room temperature
Helium	None
Hydrogen	None
Hydrogen Sulphide	Slight reaction at red heat
Hydro-Carbon Vapor	Reaction above 700ºC
Iodine Vapor	Reaction above 300ºC
Mercury Vapor	None
Nitrogen	None up to 2000ºC
Nitrogen Oxides	Oxidation at higher temperature
Sulphur Vapor	Slightly reaction
Sulphur Dioxide	Oxidation at elevated temperatures
Water Vapor	Oxidation at red heat
Aqua Regia	Oxidation at room temperature
Hydrochloric Acid	Cold - none Hot - none
Hydrofluoric Acid	Cold - slight reaction Hot - none
Hydrofluoric plus Nitric Acid	Rapid solution
Nitric Acid	Cold - none Hot - very slight reaction
Phosphoric Acid	Cold - none Hot - slight reaction
Sulphuric Acid	Cold - none
Organic Acids	Practically none
Ammonium Hydroxide	None
Potassium Hydroxide or Sodium Hydroxide	
Aqueous	None
Molten	Slight
Potassium or Sodium	
Nitrates and Nitrites	
Aqueous	Very slight
Molten	Complete solution
Carbon-Solid	Formation carbide above 800ºC
Sulphur-Molten	Slow reaction