

DATA SHEET DS4

Element	Flame Color	Charc. Test Sublimate Hot	Charc. Test Sublimate Cold	Charc. Test Fusion	Bead Test Ox. Flame Bead Hot	Bead Test Ox. Flame Bead Cold	Bead Test Reduc. Flame Bead Hot	Bead Test Reduc. Flame Bead Cold	Odor/Smoke
Antimony	pale green	white w/ blue outer fringe, disappears w/ oxidiz. flame	white w/ blue outer fringe, disappears w/ oxidiz. flame	--	pale yellow	colorless	pale yellow	colorless	*dense white smoke
Arsenic	--	white	white	--	--	--	--	--	* garlic odor * dense white smoke
Barium	yell.-green	--	--	--	--	--	--	--	
Bismuth	--	--	--	Reducing Flame: reddish-bwn, brittle metallic bead	pale yellow	colorless	gray	gray	
Cadmium	--	reddish brown	reddish brown	--	pale yellow	colorless	pale yellow	colorless	
Calcium	orange-red	--	--	--	--	--	--	--	
Chromium	--	--	--	--	yellow green	yellow green	green	green	
Cobalt	--	--	--	--	blue	blue	blue	blue	
Copper	blue to green	--	--	Fusing Flame: copper beads formed	green	blue	opaque	colorless to green	
Iron	--	--	--	--	yellow orange	green brown	green	pale green	
Lead	light blue	yellow w/ blue outer fringe	--	Reducing Flame: silver metallic malleable beads	pale yellow	white-colorless	pale yellow	colorless	
Manganese	yellow green	--	--	--	violet	red-violet	colorless	colorless	
Molybdenum	--	lemon yellow w/ blue outer fringe	white, and turns blue w/ reducing flame	--	pale-yellow	colorless to white	brown	brown-black	
Nickel	--	--	--	--	violet	reddish brown	gray-opaque	gray-opaque	
Selenium	--	Fusing Flame: silver w/ red outer fringe	silver, and turns blue w/ reducing flame	--	--	--	--	--	*brown smoke *horseraddish odor
Silver	--	--	--	Grind oxidized material, and mix w/ 2 parts NaCO ₃ . Reheating gives silver metallic malleable bead	--	--	--	--	
Sodium	yellow	--	--	--	--	--	--	--	
Strontium	crimson red	--	--	--	--	--	--	--	
Sulfur	--	--	--	--	--	--	--	--	*rotten egg odor
Tellurium	blue	white	white, and turns light green w/ reducing flame	--	--	--	--	--	
Tin	--	white	white	Mix w/ 2 parts NaCO ₃ . Reducing Flame: white, silver metallic bead. Turns dull when cool.	--	--	--	--	
Titanium	--	--	--	--	pale yellow	colorless-white	gray	brown-violet	
Tungsten	--	--	--	--	pale yellow	colorless	yellow	yellow-brown	
Uranium	--	--	--	--	yellow-orange	yellow-brown	green	green	
Vanadium	--	--	--	--	yellow	yellow-green	green	green	

Zinc	blue-green	pale yellow	white	--	--	--	--	--	
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