

# Titanium Hydride powder, Grade GP1



<b>PRODUCT</b>	Titanium Hydride powder, Grade GP1
	SPTH Type                      Product No. 20013
	CAS-No. 7704-98-5                      EINECS-No. 231-726-8
<b>APPEARANCE</b>	Grey to Black
<b>FORMULA</b>	TiH <sub>2</sub>

**APPLICATION**                      Titanium hydride (TiH<sub>2</sub>) Common applications include ceramics, pyrotechnics, sports equipment, as a laboratory reagent, as a blowing agent, and as a precursor to porous titanium. When heated as a mixture with other metals in powder metallurgy, titanium hydride releases hydrogen which serves to remove carbon and oxygen, producing a strong alloy. They are also utilized in initiator squibs and igniters.

## SPECIFICATION

Ti <sub>total</sub>	min. 94%
Ignition gain	min. 56.7%
Auto Ignition temperature	> 230°C
Surface area(BET)	2.8 +/- 0.2 m <sup>2</sup> /g
H	min. 3.7%
Fe	max. 0.08%
Mn	max. 0.006%
Si	max. 0.05%
Mg	max. 0.02%
Particle size (by Seiving)	min. 99.9 % < 38μm
Average particle size (Blaine)	2.3 +/- 0.4μm
Average particle size (Malvern)	4.6 +/- 0.6μm