

Titanium Hydride powder, Grade AR1



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| PRODUCT | Titanium Hydride powder, Grade AR1 |
| | SPTH Type Product No. 20011 |
| | CAS-No. 7704-98-5 EINECS-No. 231-726-8 |
| APPEARANCE | Grey to Black |
| FORMULA | TiH ₂ |

APPLICATION Titanium hydride (TiH₂) 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

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| Ti _{total} | min. 95% |
| Ignition gain | min. 58.8% |
| Auto Ignition temperature | min 400°C |
| Surface area(BET) | 0.6 +/- 0.2 m ² /g |
| Fe | max. 0.08% |
| H | min. 3.8% |
| Mn | max. 0.006% |
| Si | max. 0.05% |
| Mg | max. 0.02% |
| Particle size | min. 99.9 % < 63µm |
| Average particle size (Blaine) | 5.0 +/- 1.0µm |
| Average particle size (Malvern) | 13.0 +/- 3.0µm |