

Graphite Fluoride

CAS number: 51311-17-2

Formula: $(CF_x)_n, x \sim 1.1$

M.W.: 31.0091032

Introduction:

Graphite fluoride materials are usually obtained by the direct fluorination reaction of graphite and fluorine gas. Since the carbon-fluorine covalent bond (CF) formed by graphite and fluorine has a large bond energy and will not decompose even under high temperature and other conditions, it is also resistant to acid and alkali corrosion and a stable electrode material, it can be used in power type and energy type primary battery depending on the fluorine content.

Properties:

White to gray solid powder, fluorine content: 53%-60%, sheet diameter: 4-10 μ m.

Applications:

Graphite fluoride is mainly used in solid lubricants, raw material for high-energy of dense lithium-fluoride batteries, neutron moderators for nuclear reactors, radioactive materials and other fields.

