

# AAA MOLYBDENUM PRODUCTS, INC.

MOLYBDENUM AND RHENIUM CHEMICALS FOR INDUSTRY

## *SPECIFICATION SHEET*

### **MOLYBDENUM DISILICIDE** **CAS Number: 12136-78-6**

#### **DESCRIPTION**

Molybdenum Silicide is a dark grey powder represented by the chemical formula  $\text{MoSi}_2$ . It is also referred to as Molybdenum Disilicide. The theoretical content is 36.9% Si and 63.1% Mo. It has a particle density of 5.7-6.0 g/cc, and an apparent density (Scott Volometer) of 15-25 g/in<sup>3</sup>. The melting point is 1870°C. However, it begins to decompose before melting.

Molybdenum Silicide is best known for its outstanding oxidation resistance at high temperatures up to about 1700°C. At temperatures above 1700°C, rapid oxidation occurs. It is also resistant to most inorganic acids, including aqua regia, and aqueous solutions of alkalis. It is easily soluble in molten alkalis.

<b>SPECIFICATIONS</b>	<b>Specification (%)</b>
Molybdenum (Mo) .....	>61.0
Silicon (Si) .....	>36.0
Carbon (C) .....	<0.3
Oxygen (O2) .....	<0.8
Nitrogen (N2) .....	<0.2
Particle Size .....	- 325 Mesh