



# Fedmet

Global Innovation for  
your High Temp World

## Calcium Carbide



Among its many metallurgical uses, calcium carbide has been found by EAF shops to be an essential tool for the removal of unwanted iron oxide from furnace slag that is carried into the ladle during tapping. Left untreated, these oxides can interfere with the downstream steel refining operation by inhibiting desulfurization, oxidizing (“fading”) alloy additions, and attacking refractories.

Although aluminum, ferro silicon, silicon carbide, and coke have also been used for this purpose, calcium carbide has proven to be more economical, more efficient, and more reproducible in its effects. This is due to the fact that unlike the other materials, calcium carbide produces CO gas which uniformly distributes and mixes the carbide while foaming the slag; it does not require a balancing lime addition like silicon-based additives do. In fact every pound of carbide adds about one pound of lime. Calcium Carbide reacts exothermically (producing heat) and does not chill the slag. Under typical conditions it does not dissolve in steel producing, has practically no carbon pick-up, no unexpected deoxidation, and nearly 100% utilization.



Fedmet can provide the grade size of calcium carbide that best meets the requirements for your particular application. Standard sizes range from 2mm – 16mm to mesh sizing. For increased ease of application, these grades are available in smaller 2 1/2 and 5 gallon containers, in addition to the conventional 55 gallon drums with 25- 10Kg bags.

In every case, carbide purity and sizing are of special importance especially with respect to oversize and fines. Typical purities range from 70% to 80% CaC<sub>2</sub>.



#### Product Specifications:

	Specifications	Manufacturer
Chemical specifications	CaC <sub>2</sub> %	70 -80%
	Fe <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub> %	1% max
	MgO %	1% max

Fedmet provides quality engineered products and services for all your high temperature applications.

For 30 years, Fedmet has provided outstanding results for our clients within the iron, steel and non-ferrous industries. Our company's reputation is built on delivering high quality products made with the world's best raw materials.

Through the use of our vast global resources, Fedmet is committed to delivering an exceptional customer experience and innovative solutions to all of our clients.



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