

Cast Tungsten Carbide

Chemical Formula	WC/W ₂ C	
HS Code	28499030	
Chemical Name	Cast Tungsten Carbide (CTC)	
Product Description	<p>Cast Tungsten Carbide is a cast and crushed tungsten carbide, chemical formula is WC/W₂C. It is of irregular particle shape. CTC is a eutectic mixture of mono tungsten carbide (WC) and di-tungsten carbide (W₂C). Average carbon content is generally between 3,8 and 4,2 wt.-%, which translates into 65-78 wt.-% W₂C and 22-35 wt.-% WC. Our CTC particles have a very fine internal structure ('Feather Structure'), resulting in high hardness combined with a certain toughness. This gives an exceptional wear resistance. Typically, CTC is used for wear resistant coatings, e.g. on conveyor screws, fan blades, wear plates, excavator bucket teeth and crusher jaws. Furthermore, CTC can be used to produce drill bits.</p>	
Chemical Characteristics (Mass Fraction in %)	C total	3,8 - 4,2
	C free	max. 0,05
	Fe	max. 0,20
	O	max. 0,06
Physical Characteristics (Mass Fraction in %)	Oversize	max. 2
	Undersize	max. 5
	By Rotap Screening per ASTM B214	
Grain Size Fractions	-2000	+1000µm
	-3150	+800µm
	-1600	+800µm



Data Sheet – Cast Tungsten Carbide, 2024

	-1180	+710µm
	-1000	+500µm
	-710	+300µm
	-500	+250µm
	-425	+250µm
	-400	+200µm
	-250	+106µm
	-200	+45µm
	-180	+63µm
	-180	+53µm
	-160	+63µm
	-150	+75µm
	-150	+45µm
	-106	+53µm
	-106	+45µm
	-90	+45µm
	-75	+0µm
	-45	+15µm

Packaging	25kg in a steel drum with liner. 50kg in a steel drum with liner. Optional 1000kg in big bag or Container.
Storage and Handling	The user shall observe all the appropriate safety regulations in force in the country of use. Store in a closed container.
Hazard information	Hazard identification in Advertising (Directive 67/548/EEC Article 26 and Directive 1999/45/EC Article 13) None.
Documentation	A COA is supplied with every shipment.