



Pana-Tetra Zinc Oxide Single Crystal

Remarkable effects of compound by single crystal property and tetrapod shape

Rubber: Braking ability and abrasion-resistant effect

Paint: Anti-static and excellent water repellence effect

Resin: Abrasion-resistant and Thermal conductivity effect

Filter: Filtration performance effect

Product features

Tetra pod shape Zinc Oxide Single Crystal

CAS# 1324-13-2

Purity 99.999%

Appearance: White powder

Packing: 10kg or 15kg, paper bag



Characteristics of Pana-Tetra

Material name	Zinc oxide
Chemical formula	ZnO
Structure	Single crystal
Shape	Tetrapod Shape
Average length of leg	10 μm, 20 μm (L-grades)
Specific gravity	5.78 g/cm ³
Bulk density	0.1 g/cm ³
Melting point under pressure	2,000 °C
Sublimation point	1,720 °C
Specific heat	0.522 KJ/(kg · K)
Thermal conductivity	25.3 W/m k
Thermal expansion coefficient	3.18 x 10 ⁻⁶ / K
Refractive index	1.9 ~ 2.0
Electricity induction (2.4 x 10 ¹⁰ Hz)	ε = 8.5
Volume resistance	10 Ω cm
Mohs Hardness	~ 4

Pana-Tetra Grade Overview

Grade	Specification	Main recommended compound matrix
WZ-0501 WZ-0501L	Untreated surface	Rubber , Elastomer , Fluoroplastics , Paint
WZ-0511 WZ-0511L	Treated surface	General resin (PP , PS , ABS , PA , PPS , LCP , etc.)
WZ-0531	Treated surface	General resin (POM , PBT , etc.)
WZ-05E1	Treated surface	Only for polycarbonate resin
WZ-05F1	Treated surface (Needle-shape)	General resin (PP , PS , ABS , PA , PPS , LCP , etc.) , Paint



Pana-Tetra Compound Resin

Unparalleled efficient compound resin has been achieved by high level of material compound technology.

Product features

- ✓ Metal-Substitute, Precision Molding Grade
Superior precise molding ability is performed by the low shrinkage rate and high fluidity
By anisotropy relief of molding, plane degree and truth disc degree are improved and warping is prevented
- ✓ Sliding and Abrasion-resistant Resin Grade
Low friction coefficient is achieved by the superior surface smoothness
Abrasion-resistant ability is much improved by compound of Pana-Tetra
- ✓ Electrification prevention, Conductive Resin Grade
High level of stable electrification prevention and conductivity.
Superior static electricity diffusion performance
- ✓ Electromagnetic Radiation Shield Resin Grade
Excellent shield by adoption of special conductive filler
Steady mold process-ability and molded product's surface condition



Pana-Tetra Compound Overview

Function	Grade	Base Resin	Features	Use example
Metal-Substitute, Precision Molding	MD15S	PPS	High rigidity / Size stability / Heatproof	Optical pickup for CD; PPS, LCP, PEEK
	MD102	PPS	High rigidity / Low specific gravity / Conductivity / Heatproof	Gear pump; PPS, LCP, PEEK
	MD401C	PPS	High rigidity / High Sliding / Conductivity / Heatproof	Audio tape head holder; PPS, LCP, PEEK
Sliding and Abrasion-resistant	MO10B	POM	High Sliding / Abrasion resistance	Precise gear; POM, PA, ABS, PPS
	MN20K66	PA	High Sliding / Abrasion resistance	Precise gear; POM, PA, ABS, PPS
Electrification prevention, Conductive	MP20A	PP	Conductivity / Size stability [Carbon compound materials]	Tray for IC; PP, PS, ABS, PBT, PPS
	MB10A	ABS	Electrification prevention / Extrusion processing [Non-carbon materials]	Tray for liquid crystal; PP, PS, ABS, PBT, PPS
	MB10AN	ABS	Electrification prevention / Extrusion processing [Non-carbon materials]	Tray for liquid crystal; PP, PS, ABS, PBT, PPS
Electromagnetic Radiation Shield	EC-100	ABS	EMI Shield / Metal-Substitute [Carbon fiber Compound]	Shielding Case
	EC-400	ABS/PC	High Sliding / Metal-Substitute [Carbon fiber Compound]	Shielding Case