Certificate of Analysis

Silver Nanoparticles

Key Spec Table

CAS #	EC Number	Hill Formula	Molar Mass
20667-12-3	243-957-1	Ag_2O	231.74 g/mol

Pricing & Availability

Catalogue Number	Availability	Packaging	Qty/Pack	Price	Quantity	
1192080022	—	Plastic bottle	25 g	**Upon Order Completion More Information**	—	
1192080101	—	Plastic bottle	100 g	**Upon Order Completion More Information**	—	

Add To Cart

Description	
Catalogue Number	119210
Product Information	
CAS number	20667-12-3
EC number	243-957-1
Hill Formula	Ag_2O
Molar Mass	231.74 g/mol
HS Code	2843 29 90
Quality Level	
Physicochemical Information	
Density	7.143 g/cm3
Melting Point	>200 °C decomposes
Bulk density	950 kg/m3

Toxicological Information	
LD 50 oral	LD50 Rat 2820 mg/kg
Safety Information according to GHS	
Hazard Pictogram(s)	
Hazard Statement(s)	H271: May cause fire or explosion; strong oxidizer. H318: Causes serious eye damage. H410: Very toxic to aquatic life with long lasting effects. EUH044: Risk of explosion if heated under confinement.
Precautionary Statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P220: Keep away from clothing and other combustible materials. P273: Avoid release to the environment. P280: Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. P283: Wear fire resistant or flame retardant clothing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Signal Word	Danger
Storage class	5.1A Strongly oxidizing hazardous materials

Safety Information according to GHS	
WGK	WGK 2 obviously hazardous to water
Disposal	27 Residues containing valuable recoverable metals should be forwarded for recycling. Container H.
Safety Information	
Categories of danger	oxidizing, corrosive
Storage and Shipping Information	
Storage	Store at +2°C to +8°C.
Transport Information	
Declaration (railroad and road) ADR, RID	UN 1479 , 5.1, I
Declaration (transport by air) IATA-DGR	UN 1479 , 5.1, I
Declaration (transport by	UN 1479 , 5.1, I

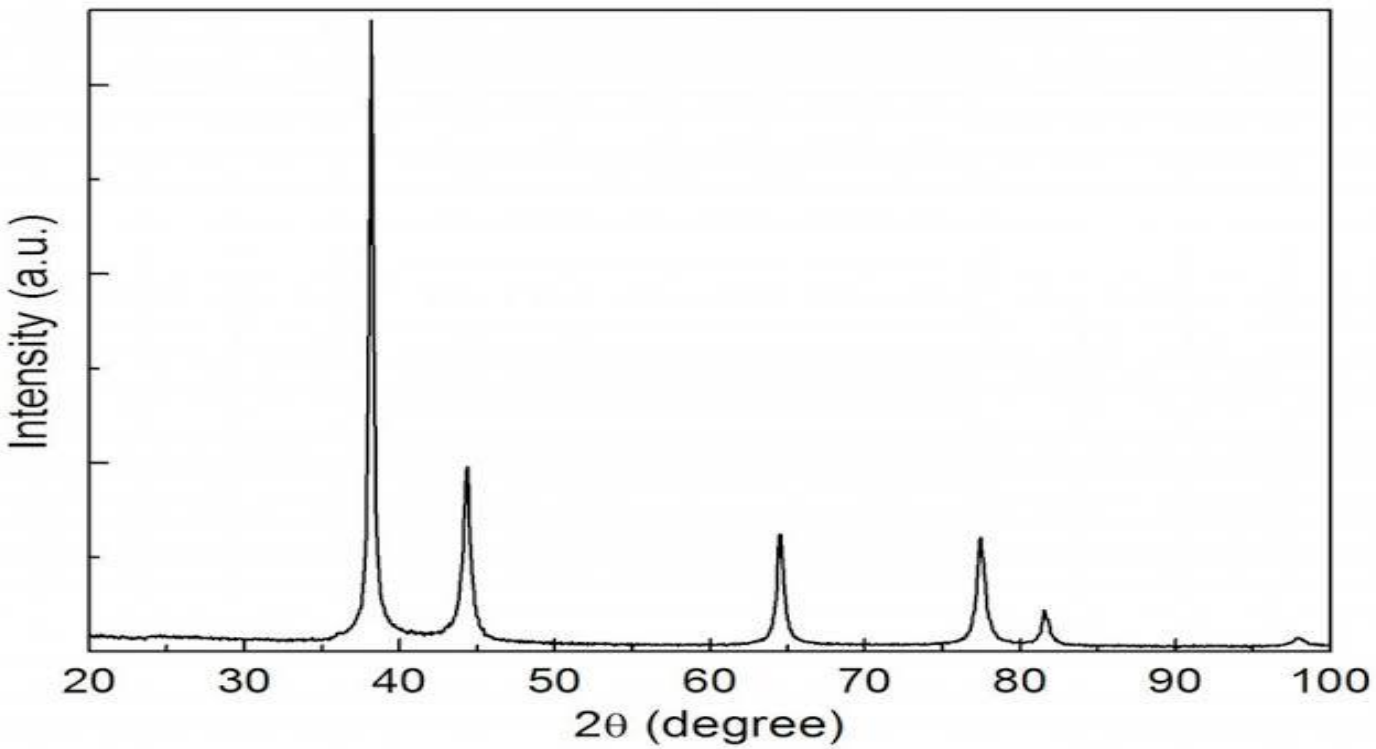
Transport Information	
sea) IMDG-Code	

Specifications	
Identity (elemental analysis)	passes test
Assay (calculated of Ag)	99.0 - 101.0 %
Ag (Silver)	92.2 - 94.0 %
Al (Aluminium)	≤ 10 ppm
Ca (Calcium)	≤ 50 ppm
Cd (Cadmium)	≤ 10 ppm
Co (Cobalt)	≤ 10 ppm
Cr (Chromium)	≤ 10 ppm
Cu (Copper)	≤ 50 ppm
Fe (Iron)	≤ 50 ppm

Specifications	
Hg (Mercury)	≤ 100 ppm
Ir (Iridium)	≤ 100 ppm
K (Potassium)	≤ 50 ppm
Mg (Magnesium)	≤ 50 ppm
Mn (Manganese)	≤ 10 ppm
Na (Sodium)	≤ 100 ppm
Ni (Nickel)	≤ 10 ppm
Os (Osmium)	≤ 100 ppm
Pb (Lead)	≤ 50 ppm
Pd (Palladium)	≤ 100 ppm
Pt (Platinum)	≤ 100 ppm
Rh (Rhodium)	≤ 100 ppm
Ru (Ruthenium)	≤ 100 ppm

Specifications	
Zn (Zinc)	≤ 10 ppm
Particle Size	
XRD	20nm
SEM	20nm

XRD :-



SEM:-