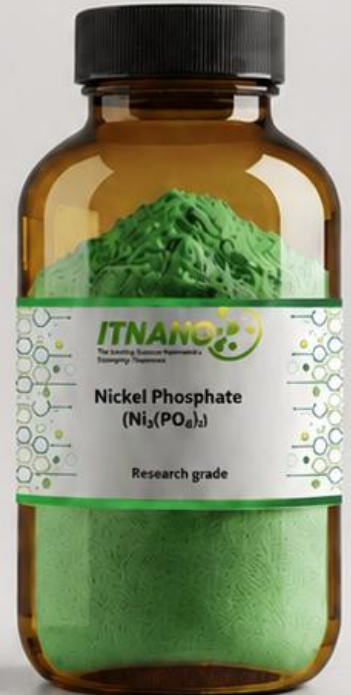


# 2026 Products Catalog



# ITNANO

The Leading Advanced Materials Company in Indonesia



**ITNANO** (CV. Inovasi Teknologi Nano) is a nationally registered brand (IDM000960929) providing high-performance, laboratory-grade functional materials for global research and industrial applications.

Backed by NRE Lab (est. 2020) Indonesia's first private nanomaterials research startup and the **Titian Research Group**, we bridge the gap between advanced material science and commercial scalability

- **Core Product Portfolio:** High-purity Graphene (and derivatives), 2D Materials (MXene and MoS<sub>2</sub>), Metal-Organic Frameworks (MOFs), advanced Metal Oxides ZnO, TiO<sub>2</sub>, MnO<sub>2</sub>, etc.), and conductive polymers.
- **Target Applications:** Next-generation battery technology, advanced composites, solar-driven interfacial evaporation (SDIE), seawater desalination, and supercapacitors.
- **Commercial Availability:** Designed to empower R&D departments and industries, our standardized materials are readily accessible online via **Tokopedia, TikTok Shop, and Shopee.**

# Our Products



- GRAPHENE SERIES
- 2D MATERIALS
- MOFS
- POLYMERS
- METAL OXIDES
- NICKEL SERIES
- CONDUCTIVE CARB
- METAL SULFIDE
- CURRENT COLLECTOR
- BINDER
- SEPARATOR
- HYDROGEL
- AEROGEL
- COIN CELL CASING

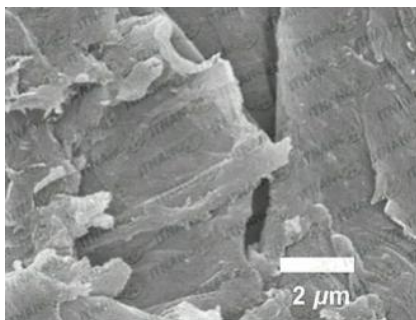
# GRAPHENE SERIES



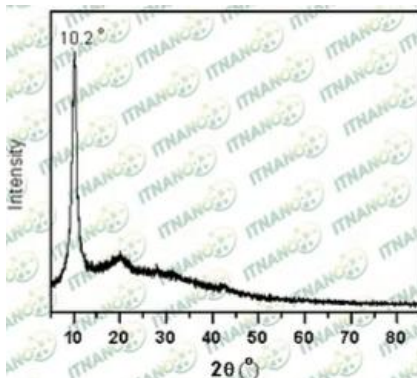
# Graphene Oxide

CAS No.	Description	Unit Sizes
2640657-49-2	Graphene Oxide Powder	1 gr, 2 gr, 5 gr and 10 gr (solid form)
	Graphene Oxide Dispersion	10ml, 60 ml, and 100 ml (dispersion)
	Graphene Oxide Paste	56 gr

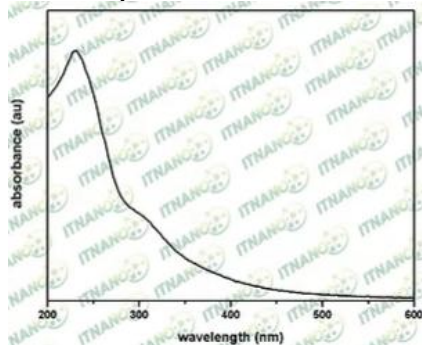
### SEM Image



### XRD Pattern



### UV-VIS Spectrum



Properties	
Purity	99 %
Grade	Research Grade
Form	Dark Brown Flake
Solubility	water
Molecular Formula	C <sub>140</sub> H <sub>42</sub> O <sub>20</sub>
Molecular Weight	2043.8
Graphene Oxide Layers	6-7 Layers (XRD)
Element Carbon (C)	81.0 wt%
Element Oxygen (O)	19.0 wt%
Element Sulfur (S)	0.1 wt%
Raman (I <sub>D</sub> /I <sub>G</sub> Ratio)	0.95
UV-VIS Spectrophotometer (Peak)	230 nm
BET Surface Area	110 m <sup>2</sup> /g

## APPLICATIONS:

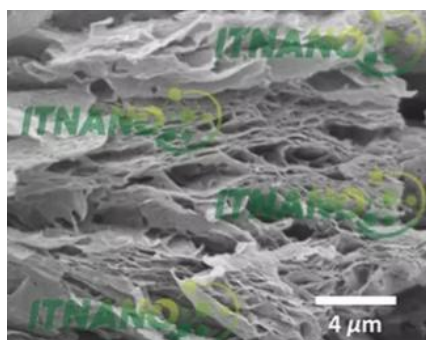
Paint Additives, Composite Materials, Anti-Corrosion Materials, Conductive Materials, Coatings, Sensors, Electromagnetic Shielding, Photocatalysts, Solar Cells, Supercapacitors, and Battery Materials.

# rGO

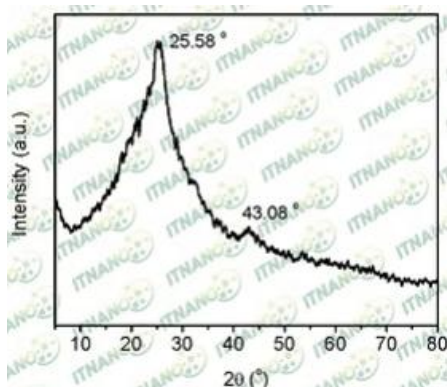
# Reduced Graphene Oxide

CAS No.	Description	Unit Sizes
1034343-98-0	Reduce Graphene Oxide	1 g, 2 g, 5 g, 10 g and 20 g

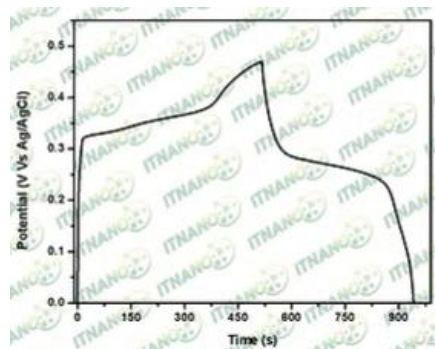
SEM Image



XRD Pattern



GCD RGO



Properties	
Purity	97 %
Grade	Research Grade
Form	Fine Black Powder
Molecular formula	C <sub>x</sub> H <sub>y</sub> O <sub>z</sub>
Reduce Graphene Oxide Layers	10-20 Layers (XRD)
Element Carbon (C)	85.6 wt%
Element Oxygen (O)	11.5 wt%
Impurities (Cl, S and K)	~ 3 wt%
Conductivity	>500 S/m

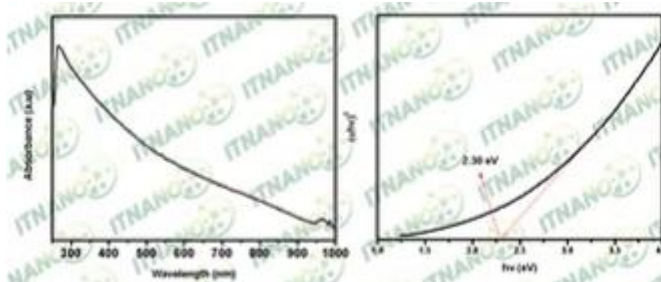
## APPLICATIONS:

Paint Additives, Composites Materials, Anti-Corrosion, Conductive Materials, Coating, Sensor, Electromagnetic Shielding, Photocatalysts, Solar Cells, Supercapacitor, Battery, Etc.

# rGO-COOH Carboxyl Graphene

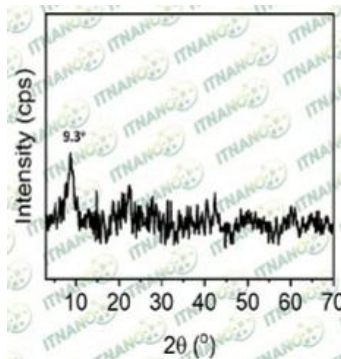
CAS No.	Description	Unit Sizes
7782-42-5	Carboxyl Graphene	1 g, 2 g, 5 g and 10 g

## UV-VIS Spectrum



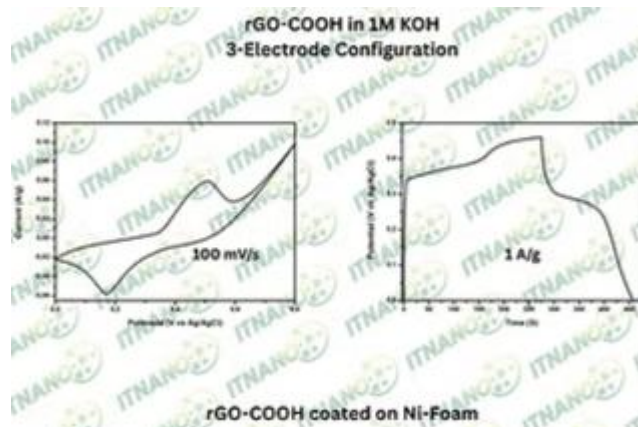
Properties	
Purity	98%
Grade	Research Grade
Form	Black
Molecular formula	rGO-COOH

## XRD Pattern



## APPLICATIONS:

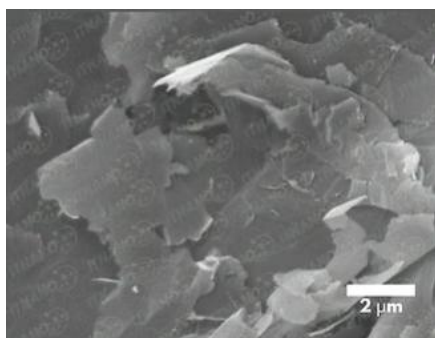
Sensors, Drug Delivery Systems, Water Treatment, Anti-Fouling and Anti-Corrosion Applications, As Well As Energy Storage Devices Such as Supercapacitors and Batteries.



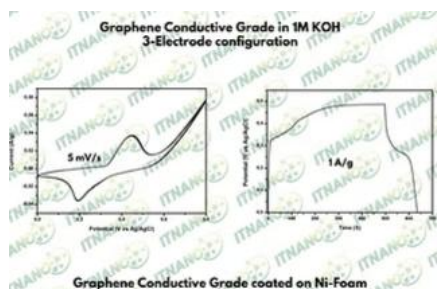
# Graphene Conductive Grade

CAS No.	Description	Unit Sizes
1034343-98-0	Graphene Conductive Grade	1 g, 2 g, 5 g and 10 g

## SEM Image



Properties	
Grade	Research Grade
Form	Greyish Black Powder
Electrical Conductivity	8000 - 14000 S/m
Electrochemical Capacitance	548.38 F/g @ 1 A/g



## APPLICATIONS:

Flexible Electronics, Printed and Wearable Devices, And Transparent Conductive Films due to its High Electrical Conductivity and Large Surface Area. It Is also applicable for Electrode Performance Enhancement, Heavy Metal Detection, and Rapid, Selective  $\text{CO}_2$  Adsorption



# Graphene Aerogel

Description	Unit Sizes
Graphene Aerogel	pcs



# Aerogel Biomassa

Description	Unit Sizes
Aerogel Biomassa	pcs



# Graphene Hydrogel

Description	Unit Sizes
Graphene Hydrogel	pcs

**2D**

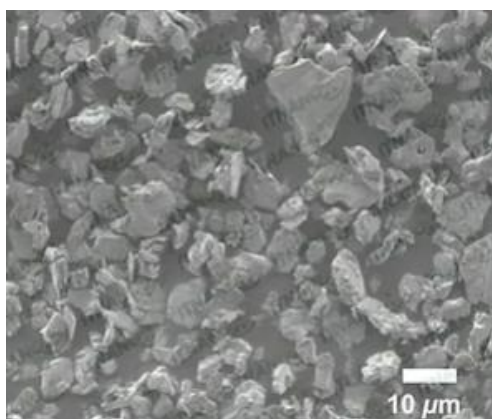
**MATERIALS**

# Ti<sub>3</sub>AlC<sub>2</sub>

## Titanium Aluminium Carbide Max Phase

CAS No.	Description	Unit Sizes
196506-01-1	Titanium Aluminium Carbide Max Powder	1 g, 2 g, 5 g, and 10 g

### SEM Image



Properties	
Purity	> 99 %
Grade	Research Grade
Form	Grey powder
Molecular formula	Ti <sub>3</sub> AlC <sub>2</sub>
Molecular weight	195.6 g/mol
BET surface area	12.51 m <sup>2</sup> /g
Density	4.2 g/cm <sup>3</sup>

### APPLICATIONS:

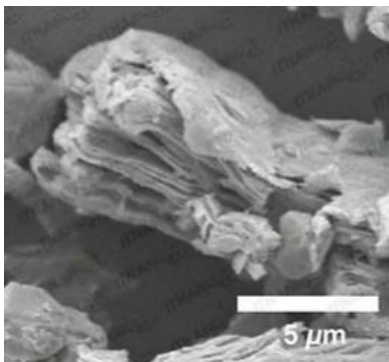
Lithium/Sodium/Zinc, Battery Applications, Heavy Metal/Azo Dye Adsorption, Electromagnetic Interference (EMI) Shielding, Gas Sensors, Composites, and Supercapacitors.

# Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub>

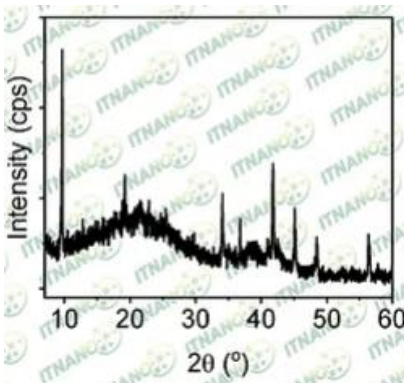
# Titanium Carbide / Mxene Phase

CAS No.	Description	Unit Sizes
12070-08-5	Titanium Carbide Powder	1 g, 2 g, 5 g and 10 g
	Titanium Carbide Dispersion	100 ml

SEM Image



XRD Analysis

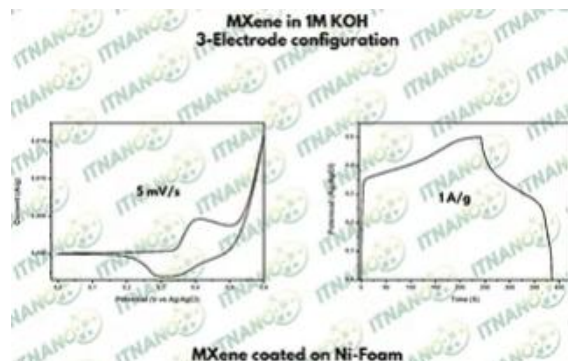
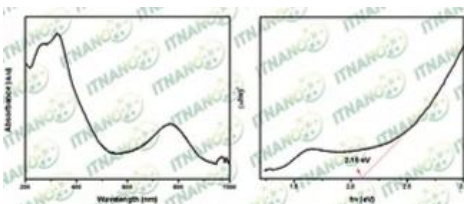


Properties	
Purity	>99 %
Grade	Research Grade
Form	Black Powder
Molecular Formula	Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub>
Molecular Weight	195.6 g/mol
Sem (Layer Thickness)	± 5 nm
XRD	2 θ = 6.5°
Electrochemical Capacitance	286.60 F/g @ 1 A/g
UV-VIS (Band Gap)	2.10 eV
Molecular Formula	Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub>

## APPLICATIONS:

Coating Additives, Composites Materials, Ferrofluid, Biosensor, Photocatalysts, Supercapacitor, Battery, Etc

UV-VIS Analysis



# h-BN Boron Nitride Hexagonal

CAS No.	Description	Unit Sizes
10043-11-5	Boron Nitride Hexagonal	5g, 10g, 50g



Properties	
Boron Nitride (BN)	≥ 99%
Free Boron Oxide	≤ 0.3%
Fe (Iron)	≤ 0.005%
Ca (Calcium)	≤ 0.005%
Mg (Magnesium)	≤ 0.005%
Al (Aluminium)	≤ 0.006%
Average Particle Size	1 μm

## APPLICATIONS:

Thermal Filler for Polymers, an Ultra-Thin Dielectric Material, and as a Protective Coating against Corrosion and Oxidation.

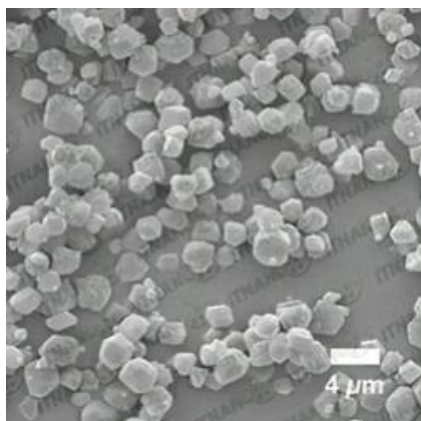
# MOFs

# ZIF-67

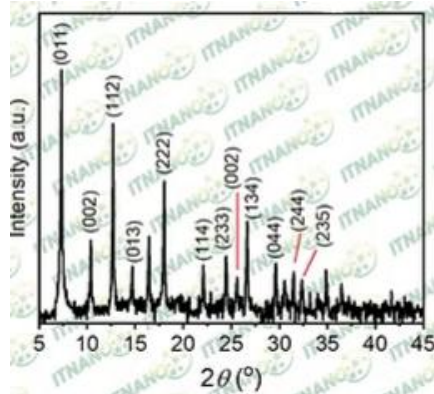
## Zeolitic Imidazolate Framework

CAS No.	Description	Unit Sizes
46201-07-04	Zeolitic Imidazolate Framework	1 g, 2 g, 5 g, and 10 g

SEM Image



XRD Pattern



Properties

Purity	97 %
Grade	Research Grade
Form	Violet
Molecular formula	$C_8H_{10}N_4Co$
Molecular weight	221.1 g/mol
XRD (Structure)	Sodalite Structure
SEM (Particle Size)	1.3 $\mu m$
BET Surface Area	1017 $m^2/g$

### APPLICATIONS:

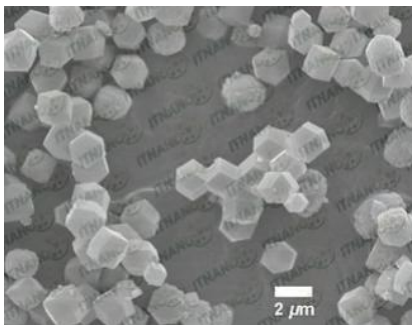
Gas Storage, CO<sub>2</sub> Capture, Separation, Sensing, Catalysis, Drug Delivery, Water Treatment, Supercapacitors, Battery, Etc.

# ZIF-8

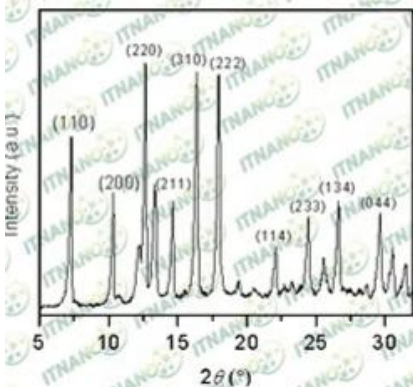
## Zeolitic Imidazolate Framework

CAS No.	Description	Unit Sizes
59061-53-9	Zeolitic Imidazolate Framework	1 g, 2 g, 5 g, and 10 g

SEM Image



XRD Pattern

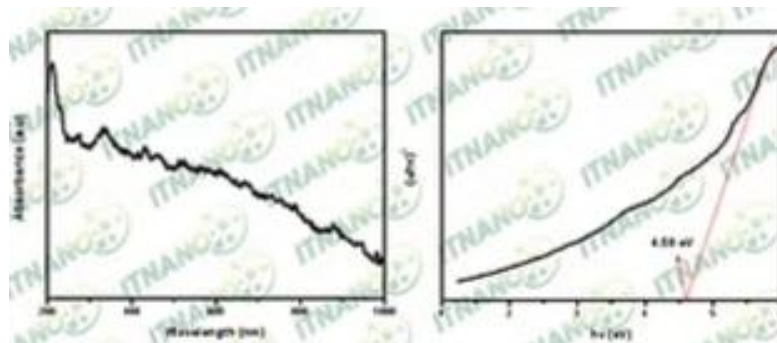


Properties	
Purity	97 %
Grade	Research Grade
Form	White
Molecular formula	$C_8H_{12}N_4Zn$
Molecular weight	229.60 g/mol
XRD (Structure)	Sodalite Structure
SEM (Particle Size)	$\pm 2 \mu m$

### APPLICATIONS:

Gas Storage, CO<sub>2</sub> Capture, Separation, Sensing, Catalysis, Drug Delivery, Water Treatment, Supercapacitors, Battery, Etc.

UV VIS Pattern

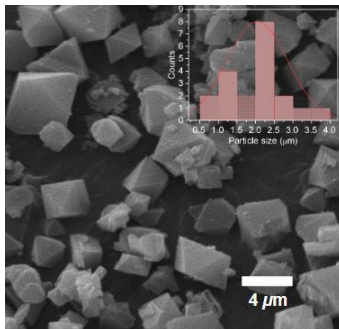


# Cu BTC

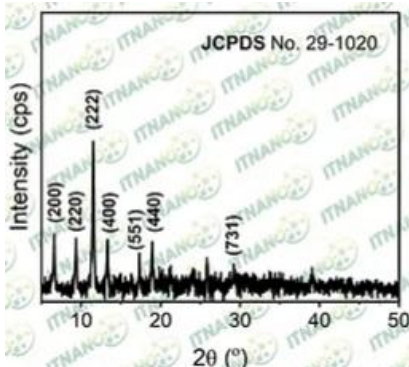
# Cu BTC Copper-1,3,5- Benzene Tricarboxylate

CAS No.	Description	Unit Sizes
51937-85-0	Cu BTC Copper-1,3,5-Benzene Tricarboxylate	1 g, 2 g, 5 g, and 10 g

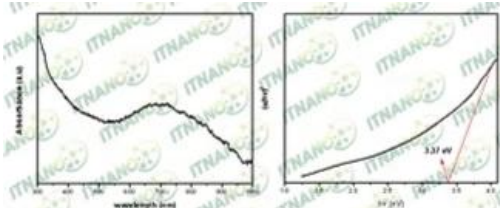
SEM Image



XRD Pattern



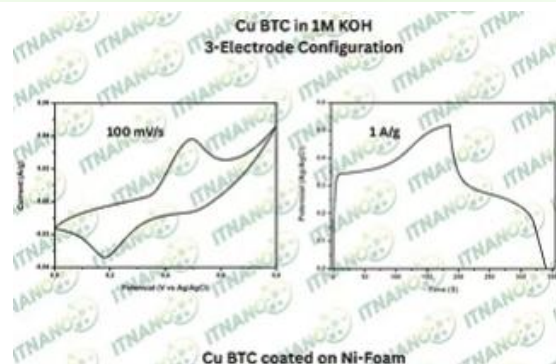
UV VIS Pattern



Properties	
Chemical Formula	$C_{18}H_6Cu_3O_{12}$
Form	Powder
Molecular Weight	604.87 g/mol
Color	Light blue powder
Grade	Research Grade

## APPLICATIONS:

Gas Storage, CO<sub>2</sub> Capture, Separation, Sensing, Catalysis, Drug Delivery, Water Treatment, And Energy Storage Applications Such As Supercapacitors And Batteries.

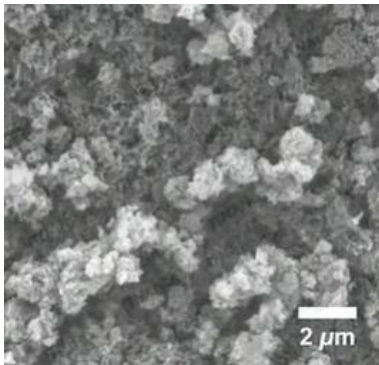


# POLYMERS

# PANI Polyaniline Powder

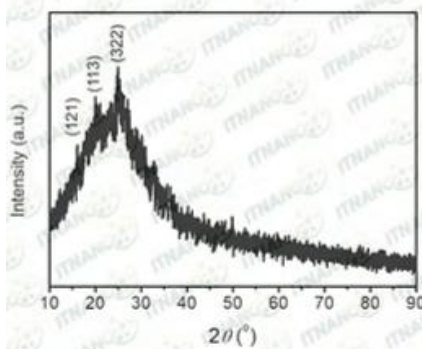
CAS No.	Description	Unit Sizes
25233-30-1	Polyaniline Powder	1 g, 2 g, 5 g, and 10 g

SEM Image



Properties	
Purity	99 %
Grade	Research Grade
Form	Blackish Green Powder
Molecular formula	C6H7N
Molecular weight	93.13 g/mol
XRD (Crystallite Size)	Emeraldine Salt
SEM (Particle Size)	60-820 nm

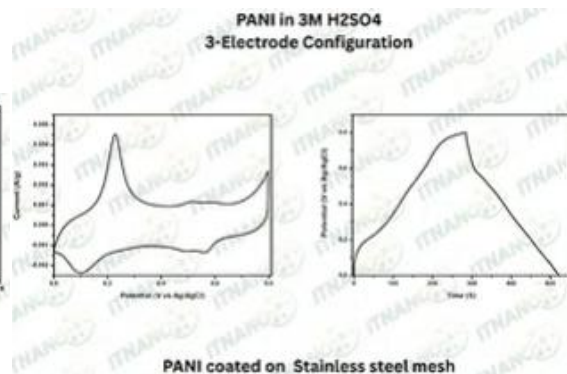
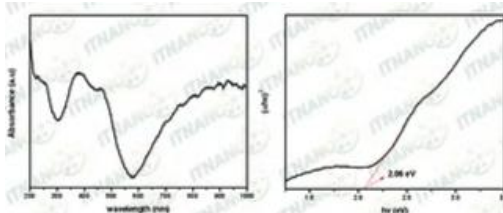
XRD Pattern



## APPLICATIONS:

Raw Material for Batteries and Supercapacitors, Composites, Gas Separation Membranes, Sensors, Optoelectronic Devices, Anti-Corrosion Coatings, and more.

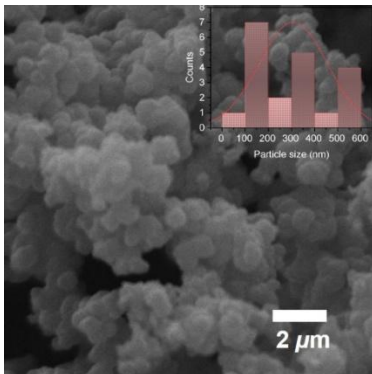
UV-VIS Spectrum



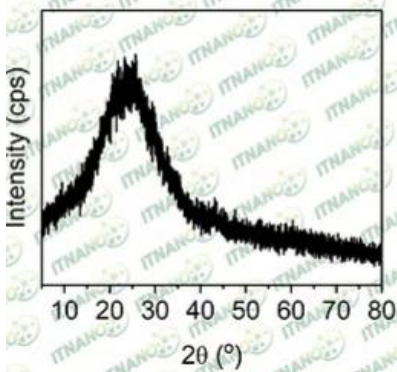
# PPy Polypyrrole

CAS No.	Description	Unit Sizes
30604-81-0	Polypyrrole	1 g, 2 g, and 5 g

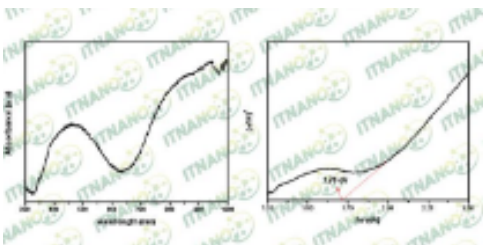
SEM Image



XRD Pattern



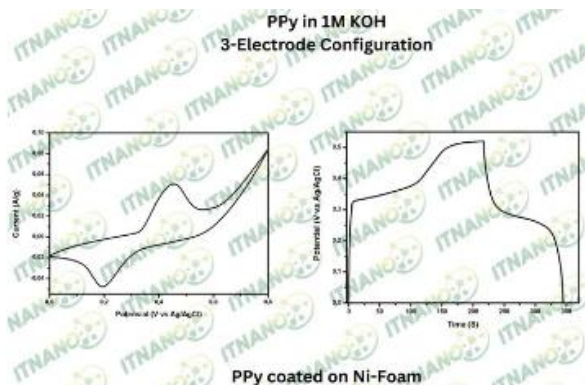
UV-VIS Spectrum



Properties	
Purity	99%
Grade	Research Grade
Form	Black
Molecular formula	PPy
Molecular weight	67,09 g/mol
SEM (Particle Size)	305 nm
UV-VIS spectrophotometer (peak)	446 nm
Electrochemical Capacitance	246.10 F/g @ 1 A/g

## APPLICATIONS:

A raw material for batteries and supercapacitors, composites, sensors, anti-corrosion coatings, and other related applications.



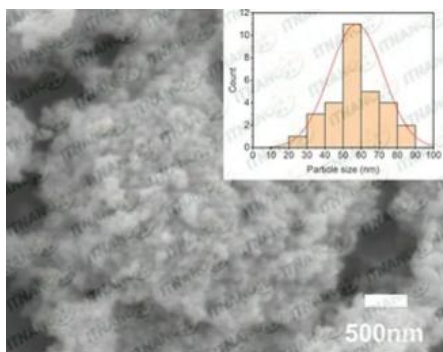
# METAL OXIDES

# ZnO

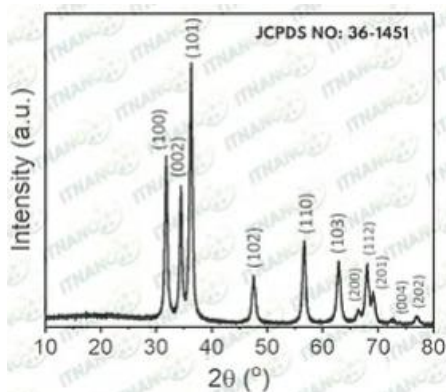
# Zinc Oxide Nanoparticles

CAS No.	Description	Unit Sizes
1314-13-2	Zinc Oxide	1 g, 2 g, and 5 g

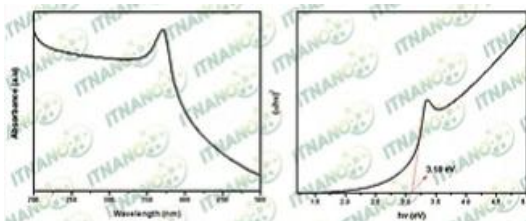
### SEM Image



### XRD Pattern



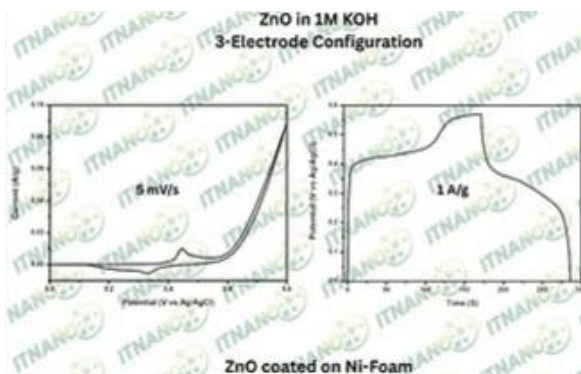
### UV-VIS Spectrum



Properties	
Purity	99 %
Grade	Research Grade
Form	White Powder
Molecular formula	ZnO
Molecular weight	81.38 g/mol
XRD (Crystallite Size)	15-18 nm
UV-Vis (Wavelength)	352 nm
SEM (Particle Size)	±15 nm

## APPLICATIONS:

Cosmetic additives, composites materials, sensor, photocatalysts, supercapacitor, battery, etc.

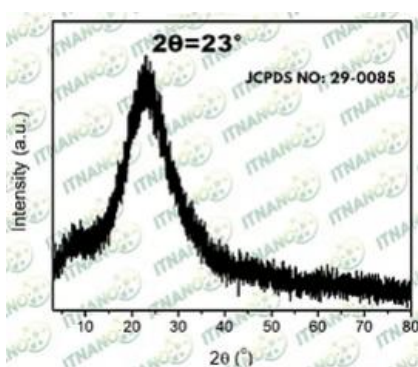




# Silicon Dioxide

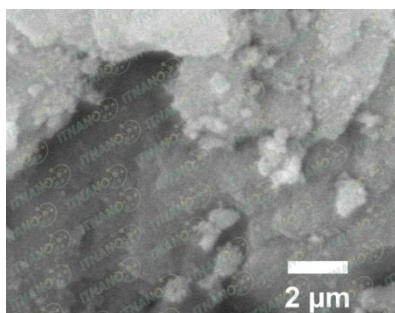
CAS No.	Description	Unit Sizes
7631-86-9	Silicon Dioxide Nanoparticles	1 g, 2 g, 5 g and 10 g

**XRD Pattern**



Properties	
Purity	98 %
Grade	Research Grade
Form	White Powder
Molecular formula	SiO <sub>2</sub>
Molecular weight	60.08 g/mol
XRD (Crystallite Size)	8.6 nm

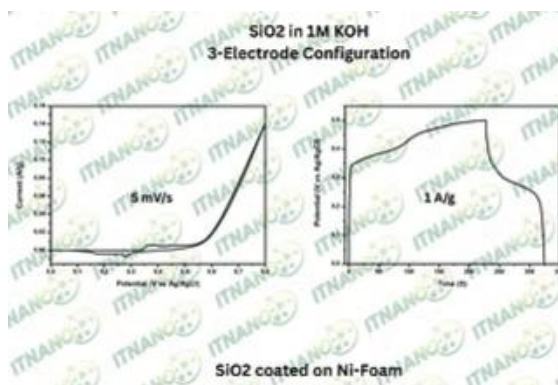
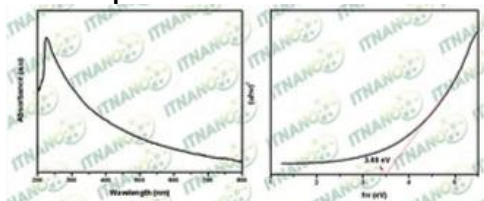
**SEM Image**



## APPLICATIONS:

Cosmetic Additives, Composites Materials, Sensor, Photocatalysts, Supercapacitor, Battery, Etc.

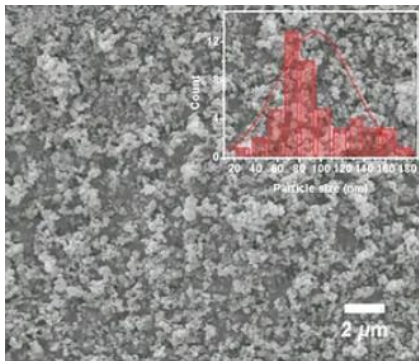
**UV-VIS Spectrum**



# TiO<sub>2</sub> Titanium Dioxide

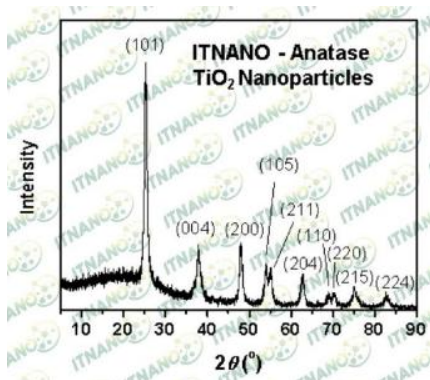
CAS No.	Description	Unit Sizes
1317-70-0	Titanium Dioxide Nanoparticles	1 g, 2 g, 5 g and 10 g

## SEM Image



Properties	
Purity	99 %
Grade	Research Grade
Form	White Powder
Molecular formula	TiO <sub>2</sub>
Molecular weight	79.87 g/mol
XRD (Crystallite Size)	11 nm
SEM (Particle Size)	±96 nm

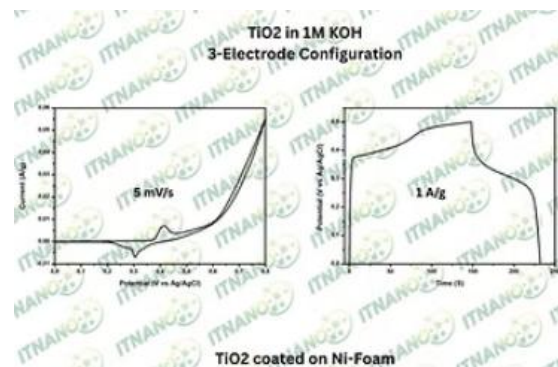
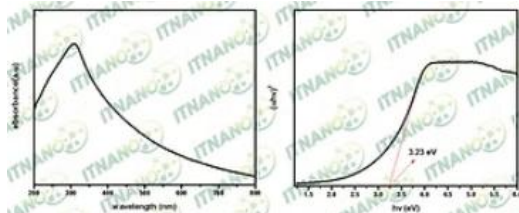
## XRD Pattern



## APPLICATIONS:

Cosmetic Additives, Composites Materials, Coating, Sensor, Photocatalysts, Supercapacitors, Battery, Etc.

## UV-VIS Spectrum

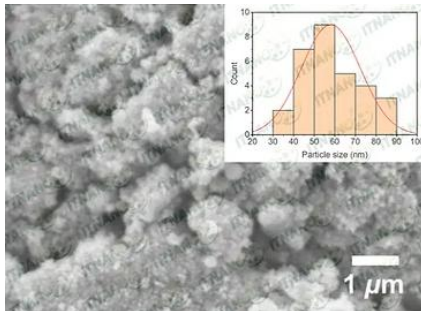


# Fe<sub>3</sub>O<sub>4</sub>

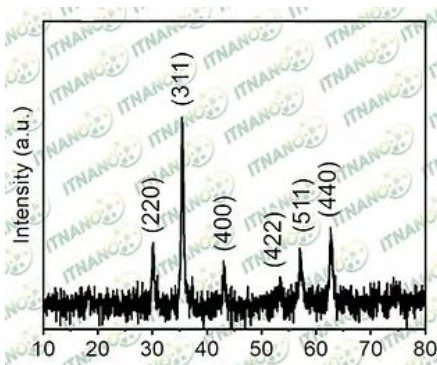
# Magnetite Iron Oxide Nanoparticles

CAS No.	Description	Unit Sizes
1317-61-9	Magnetite Iron Oxide	1 g, 2 g, 5 g and 10 g

### SEM Image



### XRD Pattern

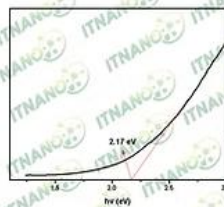
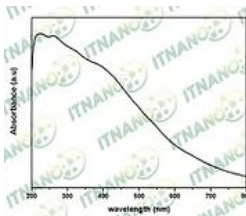


Properties	
Purity	99 %
Grade	Research Grade
Form	Black Powder
Molecular formula	Fe <sub>3</sub> O <sub>4</sub>
Molecular weight	231.533 g/mol
XRD (Crystallite Size)	16 nm
SEM (Particle Size)	±58 nm

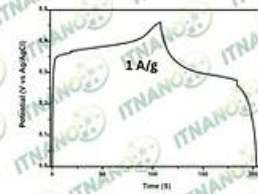
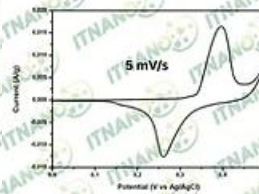
## APPLICATIONS:

Additional Additives In Magnetic Coating, Ferrofluids, Biosensors, Waste Purification, Supercapacitors, Battery, Etc.

### UV-VIS Spectrum



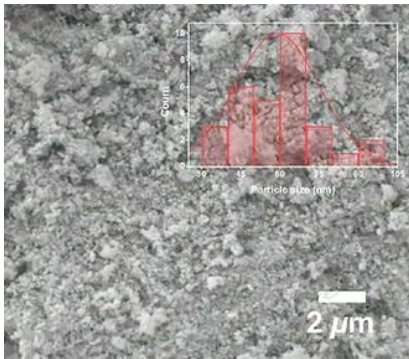
### Fe<sub>3</sub>O<sub>4</sub> in 1M KOH 3-Electrode Configuration



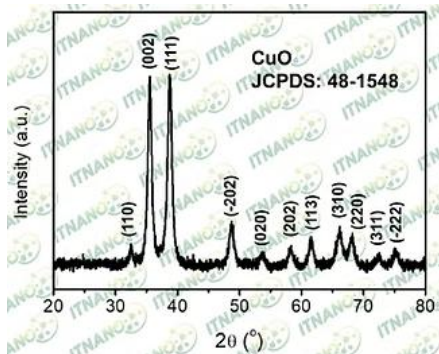
# CuO Copper Oxide

CAS No.	Description	Unit Sizes
1317-38-0	Copper Oxide	1 g, 2 g, 5 g and 10 g

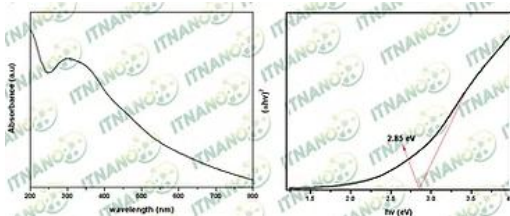
## SEM Image



## XRD Pattern



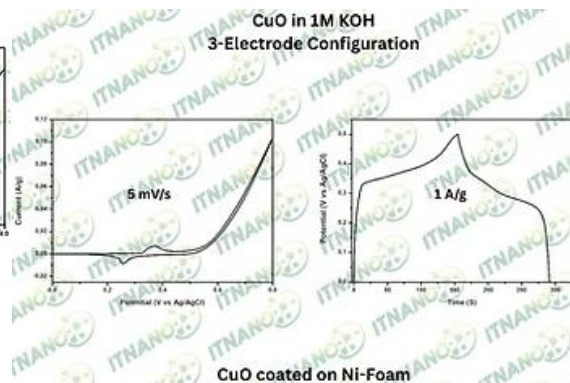
## UV-VIS Spectrum



Properties	
Purity	99 %
Grade	Research Grade
Form	Black Powder
Molecular formula	CuO
Molecular weight	79.55 g/mol
XRD (Crystallite Size)	12 nm
SEM (Particle Size)	59 nm

## APPLICATIONS:

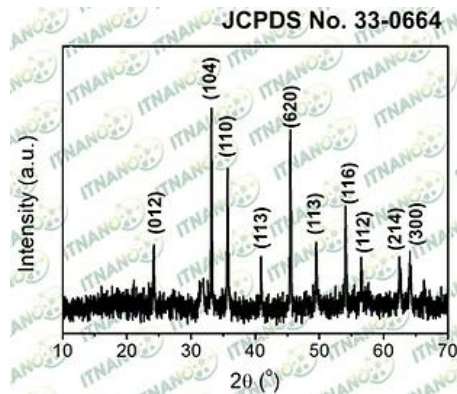
Antibacterial, Antimicrobial, Therapeutic Agent, Coating, Photocatalyst, Anode Material For Batteries And Supercapacitors, Sensor, Etc.



# Fe<sub>2</sub>O<sub>3</sub> Nanoparticles

CAS No.	Description	Unit Sizes
1317-60-8	Fe <sub>2</sub> O <sub>3</sub> Nanoparticles	1 g, 2 g, 5 g and 10 g

## XRD Pattern



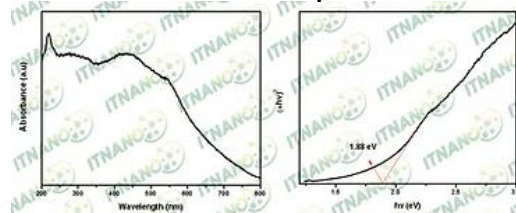
## Properties

Purity	98 %
Grade	Research Grade
Form	Dark Brick Red
Molecular formula	Fe <sub>2</sub> O <sub>3</sub>
Molecular weight	159.69 g/mol
XRD (Crystallite Size)	48 nm
UV-VIS	200-630 nm

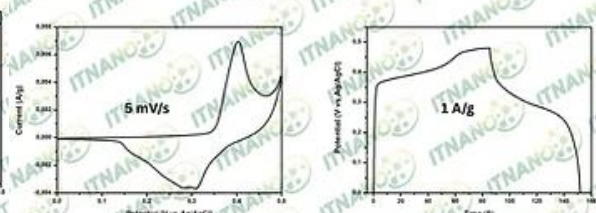
## APPLICATIONS:

Catalysts, pigments, magnetic materials, gas sensors, and lithium ion batteries.

## UV-VIS Spectrum



## Fe<sub>2</sub>O<sub>3</sub> in 1M KOH 3-Electrode Configuration



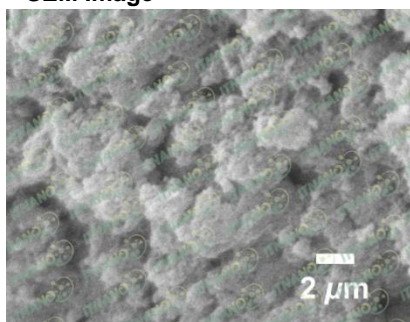
## Fe<sub>2</sub>O<sub>3</sub> coated on Ni-Foam



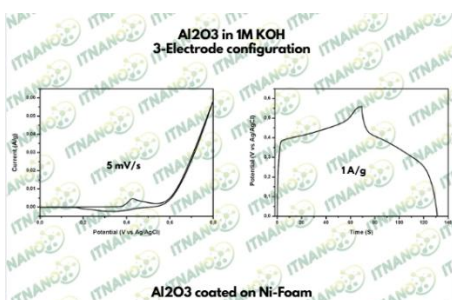
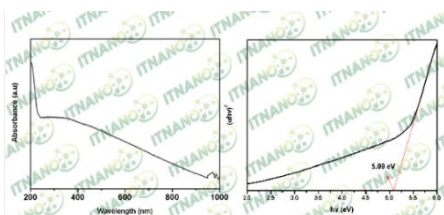
# Aluminium Oxide

CAS No.	Description	Unit Sizes
1344-28-1	Aluminium Oxide Powder	1 g, 2 g, 5 g and 10 g
	Aluminium Oxide Dispersion	10 mg/ml

**SEM Image**



**UV-VIS Spectrum**



**Properties**

Purity	99 %
Grade	Research Grade
Form	White Powder
Molecular formula	Al <sub>2</sub> O <sub>3</sub>
Molecular weight	102 g/mol
Crystal Phase	Boehmite- Amorphous
Electrochemical Capacitance	110.79 F/g @ 1 A/g
Band Gap Energy (E <sub>g</sub> )	5.09 eV

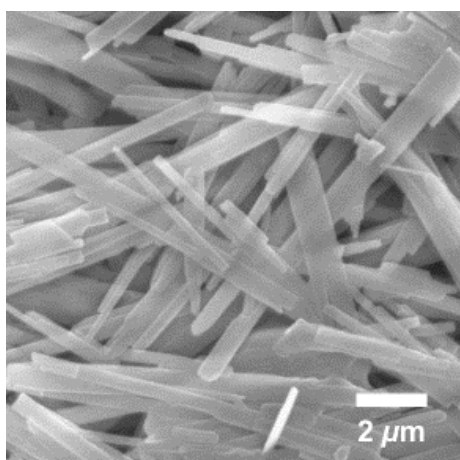
## APPLICATIONS:

Heat-Resistant Ceramic Material, an Abrasive for Sanding and Polishing, a Catalyst Support, An Electronic Insulator, and an Adsorbent for Water Purification, Etc.

# MoO<sub>3</sub> Molybdenum Oxide

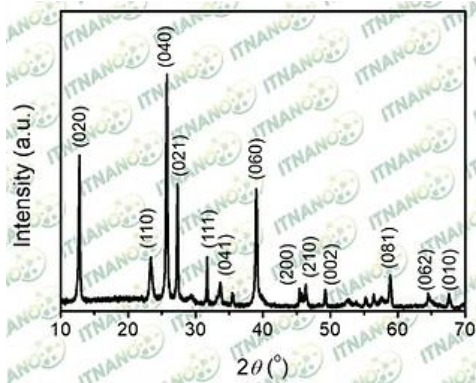
CAS No.	Description	Unit Sizes
1313-27-5	Molybdenum Oxide Nanopowder	1 g, 2 g, 5 g and 10 g

SEM Image



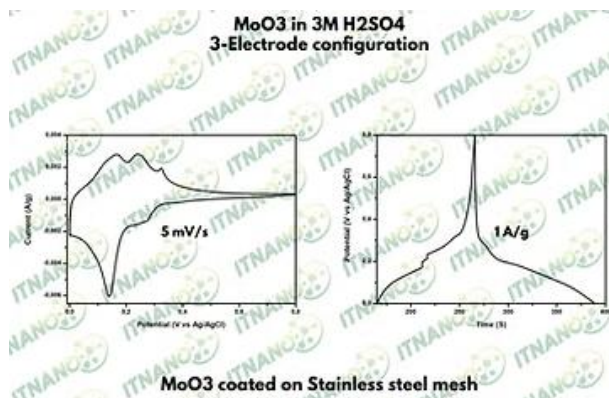
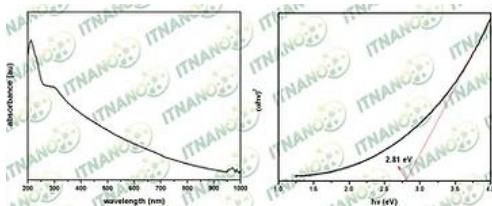
Properties	
Purity	99 %
Grade	Research Grade
Form	Light Yellowish Green
Molecular formula	MoO <sub>3</sub>
Molecular weight	143.94 g/mol
XRD (Crystallite Size)	~32 nm
SEM (Particle Size)	Length: 3,8 μm, dia: 120 nm, thick: 40 nm

XRD Pattern



## APPLICATIONS:

Catalyst, pigments, ceramics, sensor, materials for batteries and supercapacitors, etc.

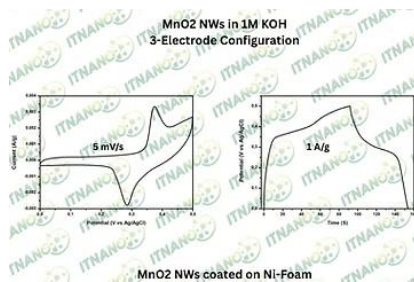
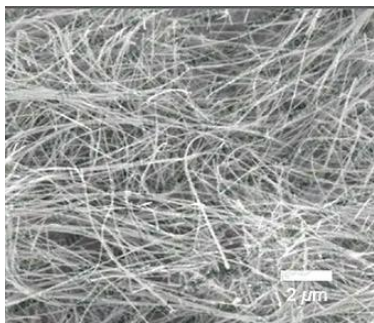


# MnO<sub>2</sub>

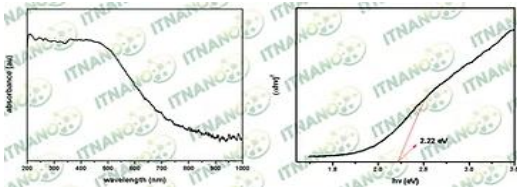
# Manganese Oxide

CAS No.	Description	Unit Sizes
1313-13-9	Manganese Oxide (MnO <sub>2</sub> ) Nanowires	1 g, 2 g, 5 g and 10 g

### SEM Image



### UV-VIS Spectrum



Properties	
Purity	96 %
Grade	Research Grade
Form	Brown powder (nanowires)
Molecular Formula	MnO <sub>2</sub>
Molecular weight	86.937
Element Manganese (Mn )	48.85 wt%
Element Oxygen (O )	42.01 wt%
Element Sulfur (S )	2.97 wt%
Element potassium (K)	6.16 wt%
SEM (Particle Size)	Length: 5-10 μm, dia: 60-80 nm
Electrochemical Capacitance	122.88 F/g @ 1 A/g
Band Gap Energy (Eg)	2.22 eV

## APPLICATIONS:

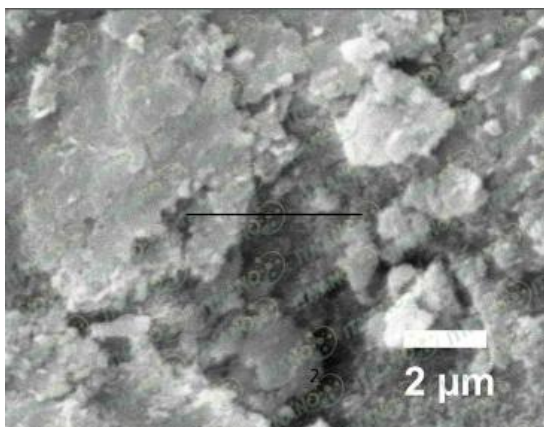
Composites materials, conductive materials, supercapacitor, battery, etc.

# MgO

# Magnesium Oxide

CAS No.	Description	Unit Sizes
1309-48-4	Magnesium Oxide Nanoparticles	1 g

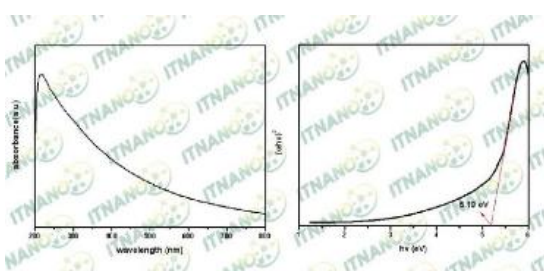
SEM Image



Properties

Purity	99 %
Grade	Research Grade
Form	White
Molecular formula	MgO
Molecular weight	40.03 g/mol
Electrochemical Capacitance	125.06 F/g @ 1A/g
Band Gap Energy	5.19 eV

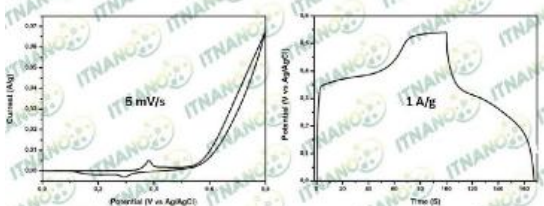
UV-VIS Spectrum



## APPLICATIONS:

Composites materials, conductive materials, supercapacitor, battery, etc.

MgO in 1M KOH  
3-Electrode Configuration

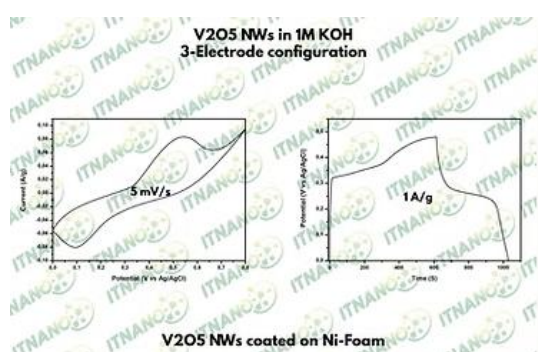


MgO coated on Ni-Foam

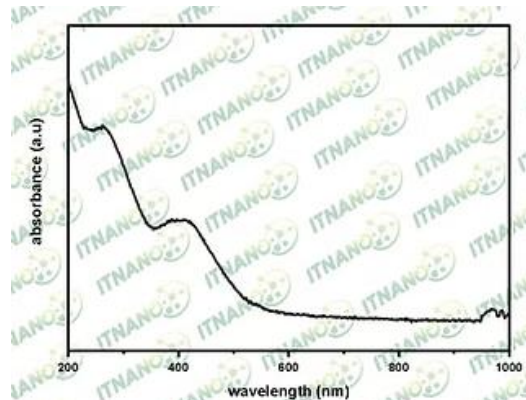
# V2O5-NWs

# Vanadium Pentaoxide-Nanowires

CAS No.	Description	Unit Sizes
1314-62-1	Vanadium Pentaoxide-Nanowires (V2O5-NWs)	1 g, 2 g, 5 g and 10 g



UV-VIS Spectrum



Properties	
Chemical Formula	V <sub>2</sub> O <sub>5</sub>
Molecular Weight	181.88 g/mol
Form	Powder
Color	Reddish Brown
Structure / Morphology	Nanowires
Grade	Research Grade

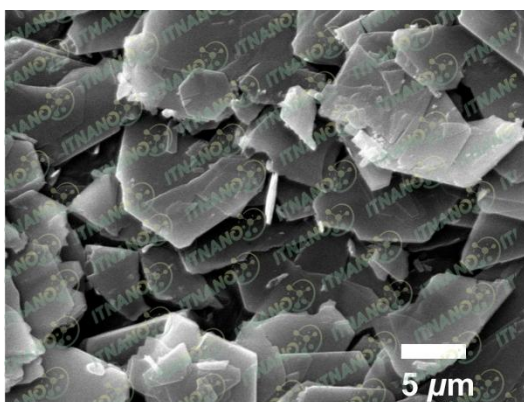
## APPLICATIONS:

Electrode Materials For Batteries And Supercapacitors, Gas And Chemical Sensors, And Catalysts In Chemical Reactions. In Addition, The Nanowire Structure With A Large Surface Area Makes This Material Effective For Use As An Adsorbent And In The Development Of Nanoelectronics Materials.

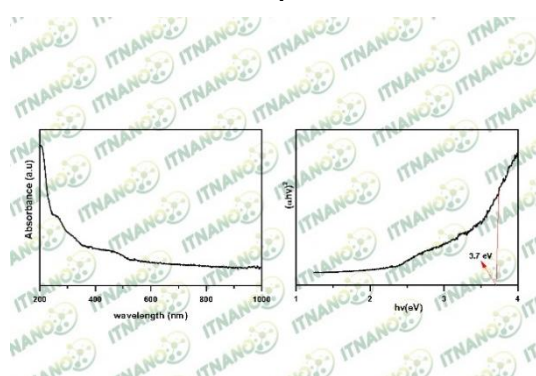
# V2O5 Vanadium Pentoxide

CAS No.	Description	Unit Sizes
. 1314-62-1	Vanadium Pentoxide-Nanosheets	1 g, 2 g, 5 g and 10 g

SEM Image



UV-VIS Spectrum

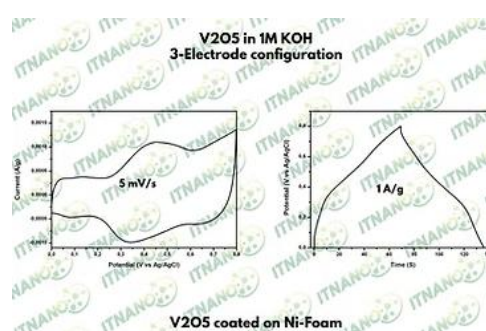


Properties

Grade	Research Grade
Form	Yellow Powder
Molecular formula	V2O5
Molecular weight	181.88 g/mol

## APPLICATIONS:

Cosmetic Additives, Composites Materials, Sensor, Photocatalysts, Supercapacitor, Battery, Etc.



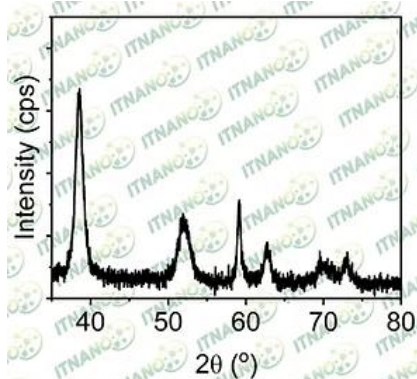
# NICKEL SERIES

# Ni<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>

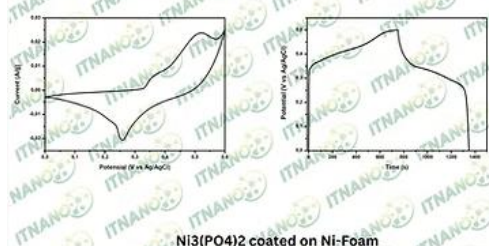
## Nickel Phosphate

CAS No.	Description	Unit Sizes
10381-36-9	Nickel Phosphate (Ni <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub> )	1 g, 2 g, 5 g and 10 g

### XRD Pattern



Ni<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> in 1M KOH  
3-Electrode Configuration



Ni<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> coated on Ni-Foam

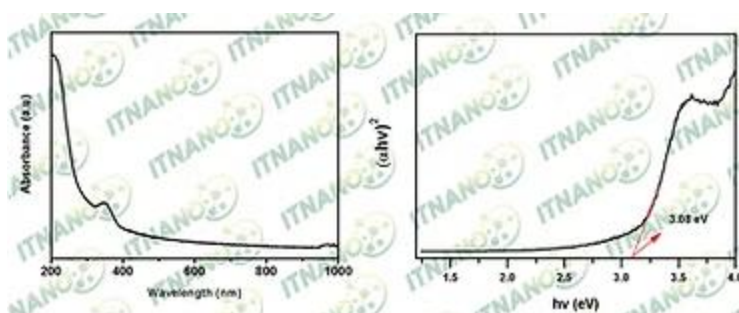
### Properties

Purity	99%
Chemical Formula	Ni <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>
Molecular Weight	366.023 g/mol
Form	Powder
Color	Green
Grade	Research Grade
Net Weight	1 gram

### APPLICATIONS:

Supercapacitor And Battery Electrodes, Catalysts/Photocatalysts, Electrochemical Sensors, And Has Potential As A Pigment And Optoelectronic Material.

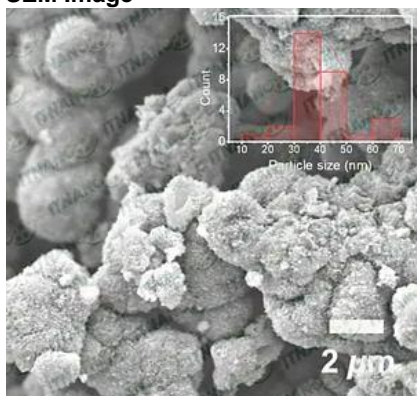
### UV-VIS Spectrum



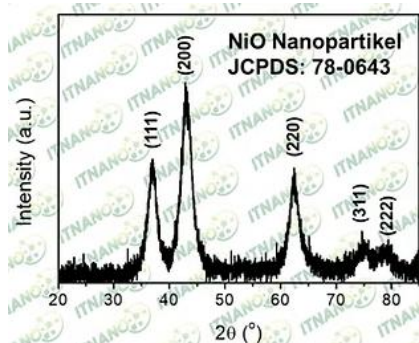
# NiO Nickel Oxide

CAS No.	Description	Unit Sizes
11099-02-8	Nickel Oxide Nanoparticles	1 g, 2 g, 5 g and 10 g

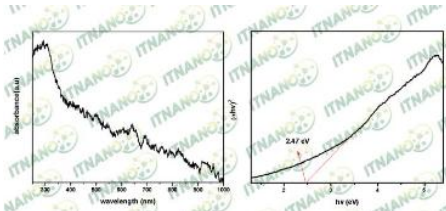
SEM Image



XRD Pattern



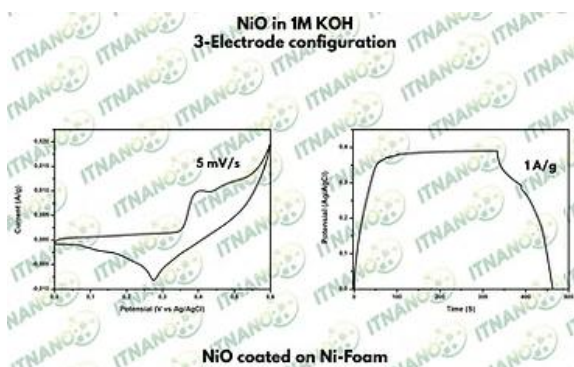
UV-VIS Spectrum



Properties	
Purity	99 %
Grade	Research Grade
Form	Black Powder
Molecular Formula	NiO
Molecular weight	74.69 g/mol
SEM (Particle Size)	±11 nm
XRD (Crystallite Size)	4 nm

## APPLICATIONS:

Anode Material In Batteries And Supercapacitors, Solar Cells, Photocatalysis, Gas Sensors, Electrochromic, Drug Delivery, Bioimaging, Etc



# CONDUCTIVE CARBON



# Super C-65 Conductive Carbon Black

CAS No.	Description	Unit Sizes
1333-86-4	Super C-65 Conductive Carbon Black	1 g, 2 g, 5 g and 10 g



Properties	
Impurity	<30 ppm
Grade	Research Grade
Form	Fine Powder
Pore Volume	400 - 510 ml/ 100 g
Density	17 – 50 g/cm <sup>3</sup>
Moisture	<1%
Particle Diameter	200 mesh > 98%, 325 mesh >80%

## APPLICATIONS:

Batteries, supercapacitors, black pigments, and other composites.

# Carbon Black Ketjen Black ECP-600JD

CAS No.	Description	Unit Sizes
1333-86-4	Carbon Black Ketjen Black ECP-600JD	1 g, 5 g, 10 g and 50 g



Properties	
Purity	>99,5%
Grade	Research Grade
Form	Fine Powder
Pore Volume	440 - 510 ml/ 100 g
Volatility	1 wt. %
Moisture	<1 wt. %
Particle Diameter	200 mesh > 98%, 325 mesh >80%
Ash Content	0.05%
SSA	1400 m <sup>2</sup> /g
Resistivity	0.3 – 1 Ohm.cm

## APPLICATIONS:

Batteries, fuel cells, supercapacitors, sensors,  
and related electrochemical devices

# MWCNTs

# Multiwalled Carbon Nanotubes

CAS No.	Description	Unit Sizes
308068-56-6	Multiwalled Carbon Nanotubes	1 g, 2 g, 5 g and 10 g



Properties	
Purity	99 %
Grade	Research Grade
Form	Fine Powder
Specific Surface Area	350-450 m <sup>2</sup> /g
Moist Content	< 0.5%
Length	10-50 μm
Outer Diameter	5-10 nm

## APPLICATIONS:

Material for batteries, supercapacitors, composite materials, anti-corrosion coatings, conductive materials, coatings, sensors, electromagnetic shielding, photocatalysis, and solar cells

# SWCNTs

## Single-Walled Carbon Nanotubes

CAS No.	Description	Unit Sizes
308068-56-6	Single-Walled Carbon Nanotubes	1 g, 2 g, 5 g and 10 g



Properties	
Grade	Research Grade
Black Powder	Fine Powder
Moist Content	2,5%
Electrochemical Capacitance	719.60 F/g @ 1 A/g

### APPLICATIONS:

Electrode materials for batteries and supercapacitors, high-performance composite materials, conductive materials, coatings, sensors, nanoelectronics devices, transparent conductive films, energy storage materials, as well as applications in the biomedical field and solar cells.

**BINDER  
SEPARATOR  
COIN CELL CASING**



# PTFE

## Polytetrafluoroethylene Dispersion

CAS No.	Description	Unit Sizes
9002-84-0	Polytetrafluoroethylene Dispersion	10 ml, 20 ml, dan 50 ml



# PVDF-HFP

## Polyvinylidene Fluoride - Hexafluoropropylene

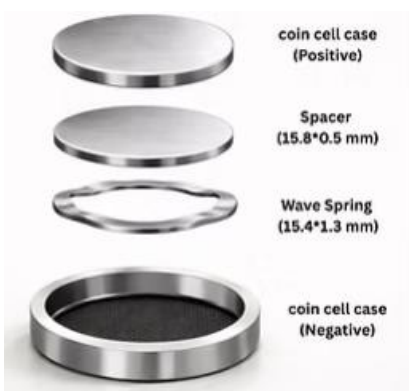
CAS No.	Description	Unit Sizes
9011-17-0	Polyvinylidene Fluoride - Hexafluoropropylene	1 g, 5 g, 10 g and 50 g



# PVDF

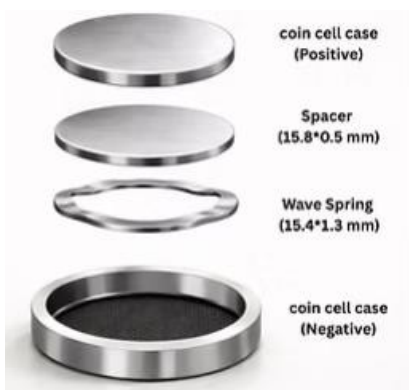
## Polyvinylidene Fluoride

CAS No.	Description	Unit Sizes
24937-79-9	Polyvinylidene Fluoride	1 g, 2 g, 5 g and 10 g



## Coin Cell Battery CR2032 - SS304

Description	Unit Sizes
Coin Cell Battery CR2032 - SS304	Pcs



## Coin Cell Battery CR2032 – SS3316

Description	Unit Sizes
Coin Cell Battery CR2032 - SS3316	Pcs



## Celgard 3501

Description	Unit Sizes
Celgard 3501	6*5 cm, 6*10 cm, 6*20 cm, 6*30 cm



## Glass Fiber 2916

Description	Unit Sizes
Glass Fiber 2916	13*5 cm, 13*10 cm, 13*20 cm, 13*30 cm



## Nickel Foam 1.55 & 0.55 mm

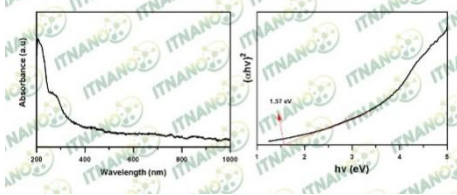
Description	Unit Sizes
Nickel Foam 1.55 & 0.55 mm	10*20 cm & 30*20 cm

# METAL SULFIDE

# FeS<sub>2</sub> Iron Sulfide

CAS No.	Description	Unit Sizes
12068-85-8	Iron Sulfide	1 g

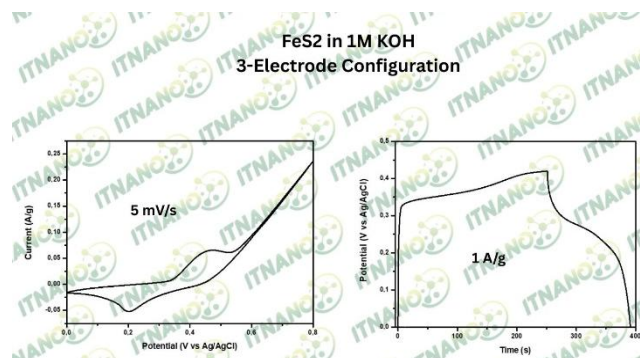
## UV-VIS Spectrum



Properties	
Purity	97-99 %
Grade	Research Grade
Form	Grayish Brown Powder
Molecular Formula	FeS <sub>2</sub>
Molecular Weight	119.97 G/Mol
Band Gap Energy (Eg)	1.57 Ev
Electrochemical Capacitance	333.43 F/G @ 1 A/G

## APPLICATIONS:

Batteries and Supercapacitors, as an Electrocatalyst, a Photocatalyst for Pollutant Degradation, and as a Sensor and Adsorbent Material due to its High Capacity and Excellent Electrochemical Properties.

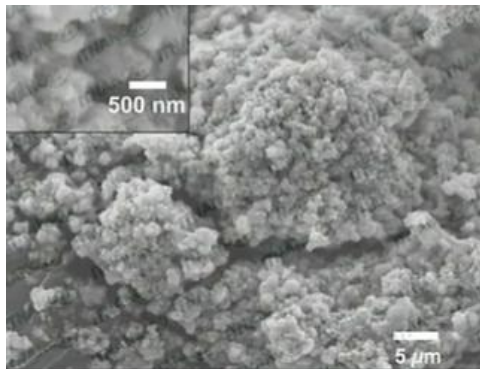


# MoS<sub>2</sub>

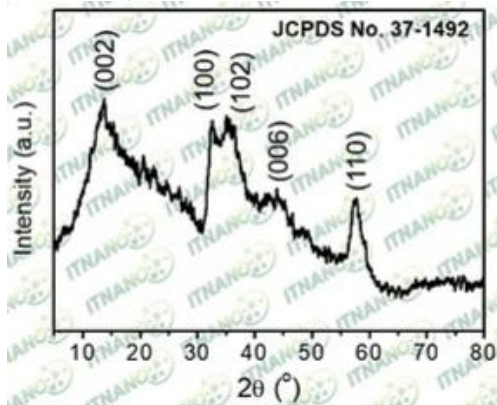
# Molybdenum Disulfide Nanoflowers

CAS No.	Description	Unit Sizes
1317-33-5	Molybdenum Disulfide Nanoflowers Powder	1 g, 2 g, 5 g, and 10 g

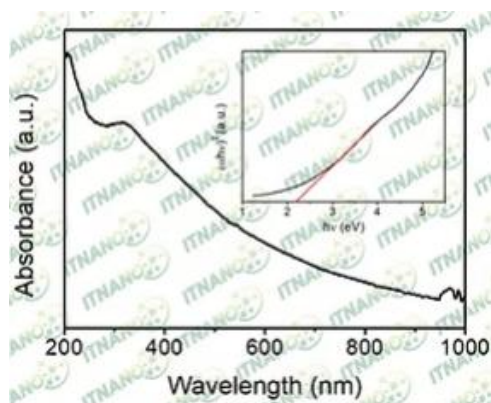
## SEM Image



## XRD Analysis



## UV-VIS Analysis



## Properties

Purity	99 %
Grade	Research Grade
Form	Black Powder
Molecular formula	MoS <sub>2</sub>
Molecular weight	160.07 g/mol
XRD (Structure))	Hexagonal 2H-MoS <sub>2</sub> , Interlayer 0.64 nm
SEM (Particle Size)	~ 490 nm
UV-VIS (Bandgap)	2.19 eV
Electrochemical Capacitance	581 F/g @ 1 A/g

## APPLICATIONS:

Powder can be used as Composite Material, Photocatalyst, Hydrogen Production, Sensor, Electromagnetic Shielding, Solar Cells, Supercapacitor, and Battery.

