

# Technical Data Sheet Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub>- Titanium Carbide- MXene **Properties**

Form : Nanosheet Powder (stack of sheet) Preparation: Wet Chemical Etching

**Full Name:** Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene (few-layer nanoflakes); **Appearance:** Black powder

few-layered Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene;

few-layer MXene Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> nanoflakes

## **Product Description**

 $Ti_3C_2T_x$  MXenes (T = O, F, OH, etc.) is a 2D material in which there is a covalent bond between C and Ti.

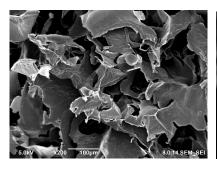
### **Application areas:**

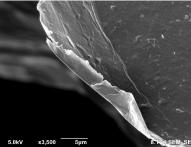
 $Ti_3C_2T_x$  is used in energy storage and conversion devices, sensors, wastewater treatment, biomedicine, and electromagnetic interference shielding due to its excellent electrical and thermal conductivity, mechanical properties, and intrinsic photothermal and antibacterial characteristics.

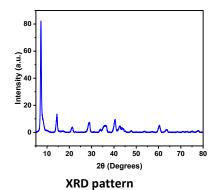
**Storage conditions:** Keep it sealed with Argon protection in a vented area at room temperature and avoid light. Shelf life is about 3 months.

#### Packaging:

## **Quality Control**







SEM images of Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> with different magnification

#### **Elemental analysis**

