

TECHNICAL DATA SHEET AQEOUS DISPERSION OF GRAPHENE

Doc Ref:TDSD11





Graphene in Water 1% [W/V]

Introduction:

The water based stable dispersion liquid product contains Graphene in a suitable stabiliser environment. It is used for various industrial purpose

Product Benefits:

This fluid is having conductive content as water dispersion can be used for heat dissipation, ink application, coolant or as lubricant

Content:

Generic Description: Graphene in Water

Chemical Formula: C
Graphite generated nanomateri
Physical Form: Liquid,

Color: Grey – Black Odor: Characteristic

CAS NO.: 7782-42-5 (graphite)

Deionized Water :<99%

Graphene: 1% [CAS No. 7782425]

Bio-Binders:<0.01%

Property of active ingredients

solute

Graphene Purity :> 99 wt% Graphene thickness:20 nm Concentration: conventional

10mg/ml

Lateral Dimension Diameter:<5µm

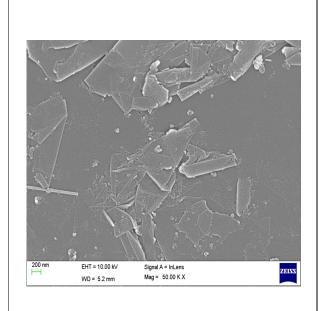
Layers of Graphene :<5

Solvent: Water

Solute: Graphene Oxide

Surfactant: Bio-source [Proprietary







SEM IMAGE OF DISPERSION SAMPLE

DISPERSION: Product

Applications:

- ✓ An additive to polymers, graphene-based composites
- ✓ Multifunctional Materials Based on Graphene
- √ Thermally conductive compounds
- ✓ Inks and coatings
- ✓ Heat sinks
- ✓ Electromagnetic Interference Shielding
- ✓ Thin film batteries
- ✓ Antistatic films
- ✓ Sensors
- ✓ Coolant
- ✓ Cement & concrete additives



PHYSICAL PARAMETER:

Solids Content	±2%
Fineness	<5µm
Colour	Greyish Liquid
Dispersability	Ethanol, Water, IPA-[polar solvents]
PH	7
Surface tension	35 dyne/cm
Viscosity	15Pa.S [25 °C]
Boiling Point	100°C
Density	0.89g/mL at 25 °C

Application Method

Shake well before use; apply as per the suitable application. Keep closed in a room temperature. Non-Toxic product.

Storage Recommendations

Tight container at room temperature .Avoid freezing & evaporation

DISCLAIMER:

The values are typical and are for very general guidance and must not be used as a basis for specifications as concrete. Information contained in this publication, and otherwise supplied to users, is based on our general experience and is given in good faith, but we are unable to accept responsibility in respect of factors which are outside our knowledge or control. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. Please refer MSDS of respective product for safe use.

It is the responsibility of the customer to ensure that the use complies with all relevant regulation and specific application.