

# TECHNICAL DATA SHEET

## CONCENTRATE FOR PVC PLASTISOL

TUBALL™ MATRIX 814 is a conductive additive for PVC plastisol. TUBALL™ MATRIX 814 is available in pasty texture form.

TUBALL™ is a unique graphene nanotube additive from OCSiAl that provides electrical conductivity at ultralow dosage with minimal impact on the rheological and mechanical properties of the host matrix.

### APPLICATIONS

- Anti-static PVC plastisol;
- Other applications where electrical conductivity is required.

### BENEFITS

- TUBALL™ MATRIX only requires an ultra-low dosage starting from just 0.5 wt.%;
- Allows production of conductive parts that retain bright colors;
- Maintains or even increases mechanical strength;
- Ensures permanent and uniform electrical conductivity without “hot spots”;
- Without a significant increase in viscosity or density of the host material.

### PROPERTIES

CONCENTRATE CARRIER	MIXTURE OF EPOXIDIZED SOYBEAN OIL AND POLYMERIC STABILIZING AGENT	
PROPERTY	TEST METHOD	VALUE
Softening point	ASTM D3461	≥15 °C
Density*	–	1.005 g/cm <sup>3</sup>

\*calculated values based on measurements of individual components

### PACKAGING

OCSiAl provides TUBALL™ MATRIX 814 samples in plastic containers (50 g concentrate). Industrial volumes are available in different packaging up to 50 kg.

### STORAGE AND TRANSPORTATION

The product is stable in unopened original packaging when stored at temperatures between 10°C and 45°C. The recommended storage life is up to 12 months when stored as directed.

## SAFETY

To ensure safe handling, the appropriate safety regulations should be observed. OCSiAl recommends that every user should be able to apply the safe handling procedures necessary for the user's applications before any handling or manufacturing takes place. A Safety Data Sheet outlining the hazards and handling methods for TUBALL™ MATRIX 814 is available.

## WARRANTIES AND DISCLAIMER

The Products correspond to the chemical composition indicated in the Technical Data Sheet and the Safety Data Sheet supplied with the Product. The information contained in this document (Information) is based on trials carried out by OCSiAl and may contain inaccuracies or errors that could cause injury, loss or damage.

OCSiAl gives no further warranty and makes no further representation regarding the Products and/or the accuracy of Information and/or suggestions for any particular use of the Products or Information, or that suggested use will not infringe any patent. The Products and Information are supplied on an "as is" basis. These express provisions are in place for all warranties, representations, conditions, terms, undertakings and obligations implied by statute, common law, custom, trade usage, course of dealing or otherwise (including implied undertakings of satisfactory quality, conformity with description, fitness for purpose and reasonable skill and care), all of which are hereby excluded to the maximum extent permitted by applicable law.

## CONTACT INFORMATION

ASIA		EUROPE		NORTH & SOUTH AMERICA
<b>KOREA</b> 11F, 254-8 Gongdeok-dong, Mapo-gu, Seoul 04212, Korea +82 32 260 0407 <a href="mailto:asiapacific@ocsial.com">asiapacific@ocsial.com</a>	<b>CHINA</b> Room 1509, Pengrunda Commercial Plaza, No. 3368 Houhaibin Road, Nanshan District, Shenzhen, Guangdong, China +86 755 867 00059  Ground floor, Unit 4, Building 7, No.160, Basheng Road, Pudong district, Shanghai, China +86 135 9012 5295  <a href="mailto:china@ocsial.com">china@ocsial.com</a>	<b>JAPAN</b> Tokyo, Japan 070-1421-0331 <a href="mailto:japan@ocsial.com">japan@ocsial.com</a>  <b>INDIA</b> Vimal intertrade PVT Ltd, Shivam centrium, Sahar road, Koldongri, Andheri East, Mumbai, 400 069, India + 91 22 6288 4200 <a href="mailto:india@ocsial.com">india@ocsial.com</a>	<b>LUXEMBOURG</b> 1 Rue de la Poudrerie, L-3364, Leudelange, Grand-Duché de Luxembourg +352 27990373 <a href="mailto:europa@ocsial.com">europa@ocsial.com</a>  <b>SERBIA</b> Balkanska 21, Belgrade, Serbia +381 692083170 <a href="mailto:balkan@ocsial.com">balkan@ocsial.com</a>	<b>USA</b> 950 Taylor Station Road, Suite #W, Gahanna, OH 43230, USA +1 415 906 5271 <a href="mailto:usa@ocsial.com">usa@ocsial.com</a>