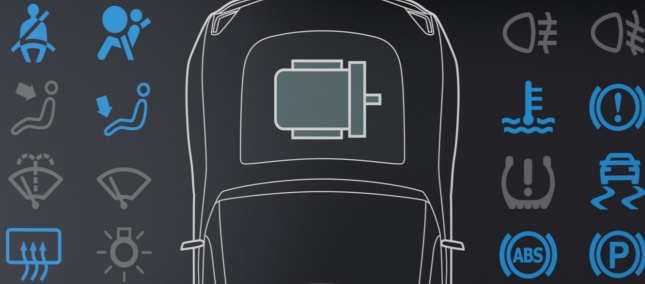


10:45 am

Home Summary **Media** Power Remote

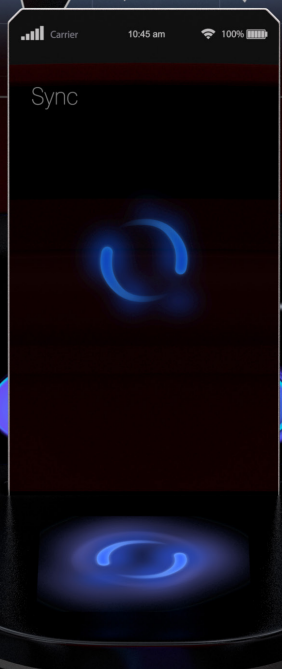
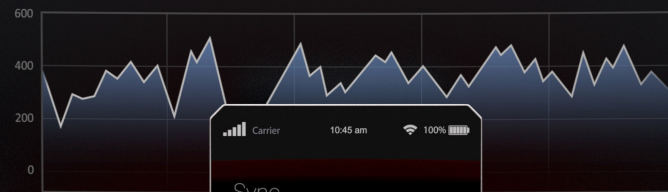
System control



Battery 110kWh
85%

Range km
650

Energy consumption



SunTronic® In-Mold Electronics Materials

Experience. Transformation.

SunChemical®

a member of the DIC group



In-Mold Electronics (IME) is a revolutionary new way of integrating electronics into plastics. It opens up immense possibilities for product designers and electronics manufactures to create 3D contoured smart electronic surfaces. IME enables the production of ergonomic, lightweight and durable parts through cost-effective manufacturing processes requiring less assembly and fewer moving parts.

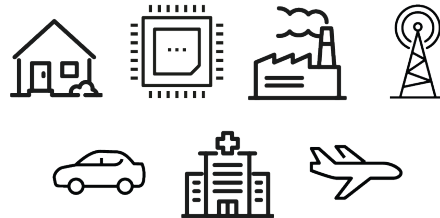
As a long-time supplier into In-Mold Decoration (IMD) and Film-Insert Molding (FIM) applications, Sun Chemical is well positioned within the value chain for appliances, automotive, industrial and medical electronics markets. With the new generation of SunTronic IME inks, you can now integrate electronic functionality into IMD/FIM applications into IMD/FIM applications using the best-in-class electronic materials that can withstand even the harshest conditions of the injection molding process.

Key Attributes and Benefits:

- SunTonic IME materials are optimized for various applications, including automotive, appliances, consumer electronics, wearables and medical devices.
- Conductive IME silver inks deliver best balance between electrical performance and 3D formability as well as cost-effectiveness and direct over-molding capabilities.
- IME dielectric inks have excellent formability and insulation reliability
- SunTronic IME inks can be used in combination with IMD graphic inks to create fully decorated plastic parts with integrated electronics functionality
- Sun Chemical delivers extensive technical expertise with the individual process steps for IME and proven capability to optimize ink stacks that can meet even the most challenging 3D forming and circuit design requirements.

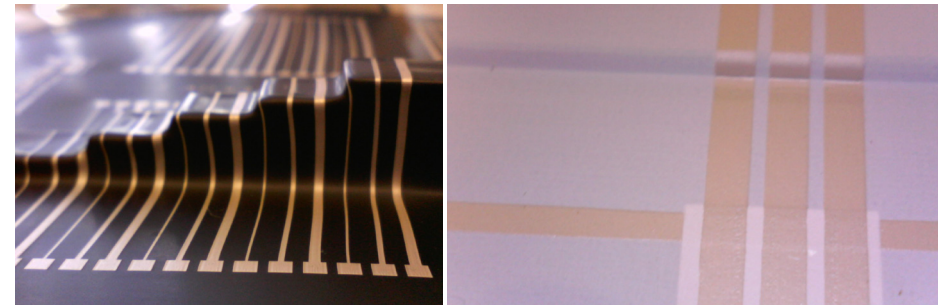
Major Applications:

- Touch switches for HMI (human-machine interface)
- Heaters (de-fogging, de-icing, automotive interior)
- LED back-lighting
- Antennae and connectivity
- Sensors (proximity, gesture detectors)
- Shielding and EMI (electro-magnetic interference) applications



Product Type	Product Name	Features
Conductive Silver*	AST6800HC	Low electrical resistance, 10-12 mOhms/sq/mil, mild 3D forming, good for interconnects, antenna and heaters
	AST6800HF	High 3D formability, 30-35 mOhms/sq/mil, excellent screen stability (down to 100 um resolution)
Dielectric/Passivation	DST4000W	Formable white dielectric ink for cross-over insulation, excelent resistance to silver migration. Used for multilayer circuitry
	DST4000TC	Formable transparent clear for barrier layer between graphic and electronic inks, adhesion tie coat for adhesion to PC resins
Conductive Carbon/Graphite	GST4700	Excellent scratch resistance, good for connector pads protection and preventing silver

* Resistivity and 3D forming can be customized based on project requirements, 10mOhms/sq/mil to 100 mOhms/sq/mil is possible



Although the information presented here is believed to be reliable, Sun Chemical Corporation makes no representation or guarantee to its accuracy, completeness or reliability of the information. All recommendations and suggestions are made without guarantee, since the conditions of use are beyond our control. There is no implied warranty of merchantability or fitness for purpose of the product or products described herein. In no event shall Sun Chemical Corporation be liable for damages of any nature arising out of the use or reliance upon the information. Sun Chemical Corporation expressly disclaims that the use of any material referenced herein, either alone or in combination with other materials, shall be free of rightful claim of any third party including a claim of infringement. The observance of all legal regulations and patents is the responsibility of the user.

SUNCHEMICAL and SUNTRONIC are either registered trademarks or trademarks of Sun Chemical Corporation, registered in the United States of America and/or other countries. DIC is a trademark of DIC Corporation, registered in the United States of America and/or other countries and used with permission. Copyright © 2023 Sun Chemical Corporation. All rights reserved.