

# KH Water Dispersed Solutions - updated



| KH SWCNT water solution (WS)             |                | WS Gen.1.0   | WS Gen.2.0   |                     | WS Gen.2.1          | WS Gen.2.2          |                     | WS Gen.2.3          |                    |
|--|----------------|--|--|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|
| SWCNT type                               |                | KH SWCNT ED  |  |                     |                     |                     |                     |                     |                    |
| SWCNT content (wt.%)*                    |                | 0.04 / 0.1   | 0.1  |                     | 0.1                 | 0.1                 |                     | 0.1                 |                    |
| Water soluble ingredients (NaCl etc.)    |                | O  |  |                     | -                   | -                   |                     | -                   |                    |
| Surfactant                               |                | O  |  |                     | O                   | O                   |                     | O                   |                    |
| Stability                                |                | very good  | very good  |                     | very good           | very good           |                     | excellent           |                    |
| Specifications                           |                | - Acid treatment can enhance the conductivity of TCF by removing surfactant. | - No need to remove surfactant and water soluble ingredients<br>- Direct coating can make TCF.<br>- Additional acid treatment can enhance the conductivity of TCF. |                     |                     |                     |                     |                     |                    |
| TCF performance (T of PET film included) | Acid treatment | O  | X  | O                   | X                   | X                   | O                   | X                   | O                  |
|  | w/o overcoat   | TT=85%<br>R=250Ω/sq  | TT=79%<br>R=900Ω/sq  | TT=79%<br>R=100Ω/sq | TT=79%<br>R=900Ω/sq | TT=79%<br>R=900Ω/sq | TT=79%<br>R=100Ω/sq | TT=79%<br>R=500Ω/sq | TT=79%<br>R=90Ω/sq |
|  | w/ overcoat    | TT=90%<br>R=250Ω/sq  | TT=83%<br>R=600Ω/sq  | TT=83%<br>R=100Ω/sq | TT=83%<br>R=600Ω/sq | TT=83%<br>R=600Ω/sq | TT=83%<br>R=100Ω/sq | TT=83%<br>R=400Ω/sq | TT=83%<br>R=90Ω/sq |

\* SWCNT content: 0 < ~ up to 0.2%

2014年2月更新