

| PHYSICAL TESTING  |                           |      | FILM THICKNESS |     |                             |      | METALS |      |                  |         | DISC |        |  |  |
|---|---------------------------|------|----------------|-----|-----------------------------|------|--------|------|------------------|---------|------|--------|--|--|
| SINGLE LAYER  | Au                        | Cd   | Ag             | Cr  | Cu                          | Ni   | Sn     | Zn   | Others/Set Only  | Size    | Type | Origin |  |  |
| 197-350-S01   | µm                        | 12.7 |                |     |                             |      |        |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S02   | µm                        | 12.7 |                |     |                             |      |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S03   | µm                        | 12.7 |                |     |                             |      |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S04   | µm                        |      |                | 5   |                             |      |        |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S05   | µm                        |      |                | 5   |                             |      |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S06   | µm                        |      |                | 0.5 |                             |      |        |      | Substrate=Nickel | Ø63x1mm | RM   |        |  |  |
| 197-350-S07   | µm                        |      |                | 5   |                             |      |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S08   | µm                        |      |                |     | 12.7                        |      |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S09   | µm                        |      |                |     | 6.2                         |      |        |      | Substrate=Zinc   | Ø63x1mm | RM   |        |  |  |
| 197-350-S10   | µm                        | 0.6  |                |     |                             |      |        |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S11   | µm                        | 0.6  |                |     |                             |      |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S12   | µm                        | 0.6  |                |     |                             |      |        |      | Substrate=Nickel | Ø63x1mm | RM   |        |  |  |
| 197-350-S13   | µm                        |      |                |     |                             | 12.7 |        |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S14   | µm                        |      |                |     |                             | 12.7 |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S15   | µm                        |      |                |     |                             | 12.7 |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S16   | µm                        |      | 12.7           |     |                             |      |        |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S17   | µm                        |      | 12.7           |     |                             |      |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S18   | µm                        |      | 12.7           |     |                             |      |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S19   | µm                        |      |                |     |                             |      | 12.7   |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S20   | µm                        |      |                |     |                             |      | 12.7   |      | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S21   | µm                        |      |                |     |                             |      | 12.7   |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S22   | µm                        |      |                |     |                             |      | 0.8    |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-S23   | µm                        |      |                |     |                             |      |        | 12.7 | Substrate=Brass  | Ø63x1mm | RM   |        |  |  |
| 197-350-S24   | µm                        |      |                |     |                             |      |        | 12.7 | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-S25   | µm                        |      |                |     |                             |      |        | 12.7 | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| MULTILAYER  | Au                        | Cd   | Ag             | Cr  | Cu                          | Ni   | Sn     | Zn   | Others/Set Only  | Size    | Type | Origin |  |  |
| 197-350-M01   | %                         |      |                | 0.5 | 5                           | 15   |        |      | Substrate=Zinc   | Ø63x1mm | RM   |        |  |  |
| 197-350-M02   | %                         |      |                | 0.5 | 5                           | 15   |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| 197-350-M03   | %                         |      |                | 0.5 |                             | 15   |        |      | Substrate=Copper | Ø63x1mm | RM   |        |  |  |
| 197-350-M04   | %                         |      |                | 0.5 |                             | 15   |        |      | Substrate=Steel  | Ø63x1mm | RM   |        |  |  |
| Reference Materials can also be provided for a wide range of Physical, Thermal, Mechanical, Corrosion, Polymer and X-Ray Diffraction testing. |                           |      |                |     |                             |      |        |      |                  |         |      |        |  |  |
| Examples are:   | <b>Physical Testing</b>   |      |                |     | <b>Thermal Properties</b>   |      |        |      |                  |         |      |        |  |  |
|   | - Viscosity               |      |                |     | - Melting Point             |      |        |      |                  |         |      |        |  |  |
|   | - Density                 |      |                |     | - Heat Capacity             |      |        |      |                  |         |      |        |  |  |
|   | - Refractive Index        |      |                |     | - Freezing Point            |      |        |      |                  |         |      |        |  |  |
|   | - Surface Properties, etc |      |                |     | - Triple Point              |      |        |      |                  |         |      |        |  |  |
|   | <b>X-Ray Diffraction</b>  |      |                |     | <b>Polymeric Properties</b> |      |        |      |                  |         |      |        |  |  |
|   |                           |      |                |     | - Molecular Weight          |      |        |      |                  |         |      |        |  |  |
|   | <b>Metrology</b>          |      |                |     | <b>Particle Size</b>        |      |        |      |                  |         |      |        |  |  |
|   | - Film Thickness          |      |                |     | - Surface Area              |      |        |      |                  |         |      |        |  |  |
|   | - Particle Shape          |      |                |     |                             |      |        |      |                  |         |      |        |  |  |
| We will be pleased to assist on receipt of your detailed requirements.  |                           |      |                |     |                             |      |        |      |                  |         |      |        |  |  |