## LG SAN 82TR



## Application

Products demanding high transparency such as refrigerator sleeves.

## Feature

SAN from LG chemical has excellent heat resistance, chemical resistance ,mechanical properties, processibility and transparency .SAN resin is widely used for production of eletric/eletronic components, automobile components and household articles.

| Properties                         | Test Method   | Test Condition                  | Unit               | Value   |
|------------------------------------|---------------|---------------------------------|--------------------|---------|
| Physical                           |               |                                 |                    |         |
| Specific Gravity                   | ASTM D792     |                                 | -                  | 1.07    |
| Molding Shrinkage                  | ASTM D955     |                                 | %                  | 0.4~0.7 |
| Melt Flow Index                    | ASTM D1238(G) | 200 / 5kg                       | g/10min            | 5       |
|                                    | -             | 220 / 10kg                      | g/10min            | 53      |
|                                    | ASTM D1238(I) | 230 / 3.8kg                     | g/10min            | 18      |
| Mechanical                         |               |                                 |                    |         |
| Tensile Strength at yield          | ASTM D638     | 50mm/min                        | kg/cm <sup>2</sup> | 680     |
| Tensile Modulus                    | ASTM D638     | 1mm/min                         | kg/cm <sup>2</sup> | 31,400  |
| Elongation at yield                | ASTM D638     | 50mm/min                        | %                  | -       |
| Elongation at break                | ASTM D638     | 50mm/min                        | %                  | 6       |
| Flexural Strength at yield         | ASTM D790     | 15mm/min                        | kg/cm <sup>2</sup> | 1100    |
| Flexural Modules                   | ASTM D790     | 15mm/min                        | kg/cm <sup>2</sup> | 36,700  |
| Izod Impact Strength<br>(Noched)   |               | 1/4" , '23                      | kg.cm/cm           | 1       |
|                                    | ASTM D256     | 1/4" , '-30                     | kg.cm/cm           | 1       |
|                                    |               | 1/8", '23                       | kg.cm/cm           | -       |
|                                    |               | 1/8", '-30                      | kg.cm/cm           | -       |
| Rockwell Hardness                  | ASTM D785     | R-Scale                         | -                  | 124     |
| Thermal                            |               |                                 |                    |         |
| Heat Deflection Temp               | ASTM D648     | 18.5kg/c㎡, 1/4"<br>(unannealed) |                    | 90      |
|                                    |               | 4.6kg/c㎡, 1/4"<br>(unannealed)  |                    | -       |
| Vicat Softening Temp               | ASTM D1525    | 5kg, 50 /h                      |                    | 101     |
| Flammability                       | UL94          | 1/8"                            | class              | HB      |
|                                    |               | 1/10"                           | class              |         |
|                                    |               | 1/16"                           | class              | HB      |
| Relative Temp Index                | UL 746B       | Elec                            |                    | 50      |
|                                    |               | Mech w/impact                   |                    | 50      |
|                                    |               | Mech w/o impact                 |                    | 50      |
| <b>Recommeded Processing Co</b>    | ndition       |                                 |                    |         |
| Injection molding-Melt temperatrue |               |                                 |                    | 190~230 |
| Injection molding-Mold tem         |               |                                 | 40~80              |         |
| Injection molding - Pre - dryir    |               |                                 | 80~90              |         |
| Injcetion molding-Pre-dryir        |               | hrs                             | 2~4                |         |

\* These property values are typical representative for natural color and are not intended for specification purpose.

When pigments are loaded, there might be slight change in the properties.