

# Anderson Development Company

## Dynamic Coefficient of Friction - Urethane on Steel



| PTMEG Backbone |          |       | Polyester Backbone |          |       | PPG Backbone |          |       | Ether/Ester Backbone |          |       |
|----------------|----------|-------|--------------------|----------|-------|--------------|----------|-------|----------------------|----------|-------|
| Product        | Hardness | COF   | Product            | Hardness | COF   | Product      | Hardness | COF   | Product              | Hardness | COF   |
| 82DGP          | 85       | 0.162 | 7DPLM              | 66.5     | 0.115 | 7501DPLF     | 75       | 0.162 | 800DP                | 75       | 0.153 |
| 75DGP-2        | 76       | 0.142 | 6DPLM              | 59       | 0.137 | 7501DP       | 74       | 0.158 | 950AP                | 94       | 0.234 |
| 1-75DP         | 73       | 0.115 | 5DPFLM             | 46       | 0.201 | 6500DPLF     | 62       | 0.193 | 2-920AP              | 92       | 0.189 |
| 75DPLF         | 72       | 0.106 | 5DPLM              | 45       | 0.194 | 9500APLF     | 96       | 0.181 | 850AP                | 87       | 0.364 |
| 70DPLF         | 66       | 0.102 | 9-5APLF            | 96       | 0.198 | 9500AP       | 95       | 0.223 | 800AP                | 81       | 0.653 |
| 2-72DP         | 63       | 0.111 | 9APFLM             | 93       | 0.179 | 9200AP       | 93.5     | 0.193 |                      |          |       |
| AL70DP         | 63       | 0.157 | 9APLM              | 90       | 0.244 | 9200AP       | 92       | 0.216 |                      |          |       |
| 2-60 DP        | 61       | 0.153 | 9APLF              | 90       | 0.250 | 9000AP       | 89       | 0.241 |                      |          |       |
| AL62DP         | 58       | 0.119 | 8-5APLF            | 89       | 0.259 | 9000AP       | 89       | 0.248 |                      |          |       |
| H60-2DP        | 57       | 0.192 | 8-6APSLM           | 86.5     | 0.367 | 8500AP       | 86       | 0.422 |                      |          |       |
| 60DPLF         | 57       | 0.146 | 8-5APLS            | 86       | 0.442 | 8200 AP      | 83       | 0.416 |                      |          |       |
| AL95AP         | 96       | 0.156 | 8-7APSLM           | 85       | 0.268 | 8000 AP      | 77       | 0.645 |                      |          |       |
| 95AP           | 96       | 0.209 | 1-8APLM            | 82       | 0.353 | 8000APLF     | 78       | 1.041 |                      |          |       |
| H95-2AP        | 95.5     | 0.276 | 8APFLM             | 82       | 0.550 | 7003AP-M     | 65       | 0.866 |                      |          |       |
| 2-95 AP        | 95.5     | 0.186 | 8APLM              | 80.5     | 0.556 | 6000AP       | 62       | 2.458 |                      |          |       |
| 95APLF         | 95       | 0.190 | 8-3APLF            | 80.5     | 0.604 |              |          |       |                      |          |       |
| 1-95AP         | 95       | 0.245 | 8APLF              | 80       | 0.857 |              |          |       |                      |          |       |
| 2-92AP         | 93       | 0.252 | 7-1APLS            | 75       | 0.791 |              |          |       |                      |          |       |
| 93APLF         | 93       | 0.260 | XP-169             | 71       | 1.252 |              |          |       |                      |          |       |
| AL92AP         | 92       | 0.216 | 7APLM              | 70       | 0.664 |              |          |       |                      |          |       |
| 2-90AP         | 90       | 0.277 | 6APLM              | 60.5     | 2.751 |              |          |       |                      |          |       |
| AL90AP         | 90       | 0.252 |                    |          |       |              |          |       |                      |          |       |
| 90 AP          | 90       | 0.352 |                    |          |       |              |          |       |                      |          |       |
| AL80-5AP/FP    | 88       | 0.314 |                    |          |       |              |          |       |                      |          |       |
| 90APLF         | 88       | 0.440 |                    |          |       |              |          |       |                      |          |       |
| AL 80-5 AP     | 86       | 0.598 |                    |          |       |              |          |       |                      |          |       |
| 85APLF         | 85       | 0.465 |                    |          |       |              |          |       |                      |          |       |
| 80-5AP         | 85       | 0.673 |                    |          |       |              |          |       |                      |          |       |
| 1-83AP         | 85       | 0.640 |                    |          |       |              |          |       |                      |          |       |
| 80APLF         | 80       | 1.137 |                    |          |       |              |          |       |                      |          |       |
| 70APLF         | 70       | 1.837 |                    |          |       |              |          |       |                      |          |       |

### Explanation of COF

The dynamic COF is the ratio of the force it takes to move an object across a surface to the force (weight) that object is exerting on the surface. The measurement is taken after the object is already in motion. This data represents an average of four specimens pulled across steel for an approximate length of six inches. The general trend is as hardness increases, the COF decreases.