# Solvent-based Fluoropolymer coating POLYFLON PTFE TD-7139BD

TECHNICAL DATASHEET

## **Solvent-based PTFE coating for low friction and conductivity.**

#### Introduction

- POLYFLON PTFE TD-7139BD is a solvent-based PTFE coating.
- It makes a black coating layer displaying low friction and excellent wear resistance and conductivity.
- It is good for sliding component.

#### **Characteristics**

| Film properties |                             | Coating properties       |                             |  |
|-----------------|-----------------------------|--------------------------|-----------------------------|--|
| Color           | Volume resistivity [Ω · cm] | Solid Content<br>[mass%] | Specific gravity of coating | Viscosity [sec]<br>(Ford Cup #4 at 25°C) |
| Black           | 20                          | 18                       | 1.03                        | 21                                       |

#### **Characteristics of the coating film**

| Items                        | Unit                    | Data      | Method of measurement  |
|------------------------------|-------------------------|-----------|--|
| Maximum temperature          | °C                      | 220       |  |
| Wear resistance              |                         |           | CS-17、1kgf、1000 rounds   |
| Taber abrasion(25°C)         | mg/1000                 | 12 – 20   |  |
|                              | rounds                  |           | With SUS23B、55.9kPa、   |
| Sliding abrasion             | mg/cm²                  | 0.1 – 0.2 | 2.3m/s、10 minutes  |
| Friction coefficient 0.04 -  |                         | - 0.07    | Bauden leben type, Steel ball 8mmφ,<br>Linear velocity 0.27cm/s, Loading 1.0kg |
| Pencil hardness              |                         |           | Mitsubishi Uni   |
| (25°C)                       |                         | 3H        |  |
| (After immersed in boiled wa | ter for 500h)           | Н         |  |
| Contact angle                |                         |           |  |
| (Water)                      | Degree                  | 102 – 106 | Contact angle meter at 25°C  |
| (Hexadecane)                 | Degree                  | 49 – 52   |  |
| Chemical resistance          |                         |           |  |
| Sulfuric acid No             |                         | nange     |  |
| Hydrochloric acid            | No cl                   | nange     |  |
| Nitric acid                  | No change               |           | for 16h at 25°C  |
| Sodium hydroxide             | Not possible (Swelling) |           |  |
| Xylene                       | Not possible (Swelling) |           |  |
| Methanol                     | Not possible (Swelling) |           |  |

<sup>\*</sup> The numeric values above are typical and not guaranteed.

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### **Handling method/Safety information**

- Be sure to read the notes on SDS and labels before use.
- This product is intended for general industry, and therefore its adequacy and safety as a raw material for medical purposes cannot be guaranteed.

For more information, visit our website.

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