

# ELASTOCYL™

CNT elastomers concentrates

## ELASTOCYL™ X1-Polyester Polyol MB

Polyester Polyol – carbon nanotubes masterbatches

### General Information

#### Description

ELASTOCYL™ X1 is a development product range that demonstrates the performance of carbon nanotubes (CNT) dispersion in elastomers. Optimal CNT dispersion provides customers the benefits and performance improvements offered by this new class of additives. CNT are frequently used in synergy with other commonly used fillers. This minimizes reformulations and accelerates product innovation.

ELASTOCYL™ X1-Polyester Polyol MB is high performance di-functional, aliphatic, polyester polyol masterbatch.

ELASTOCYL™ X1-Polyester Polyol MB is used for castable process and need to be heated between 75-80°C to be used.

#### Key Applications

- ESD (Electrostatic Discharge) and electrically conductive parts
- Automotive, Railway, Industrials, Energy

#### Benefits

- Excellent electrical conductivity at low loading
- Excellent surface finish
- Improvements of key mechanical properties (abrasion resistance,...)
- Ease of processing
- No skid mark

### Main Characteristics

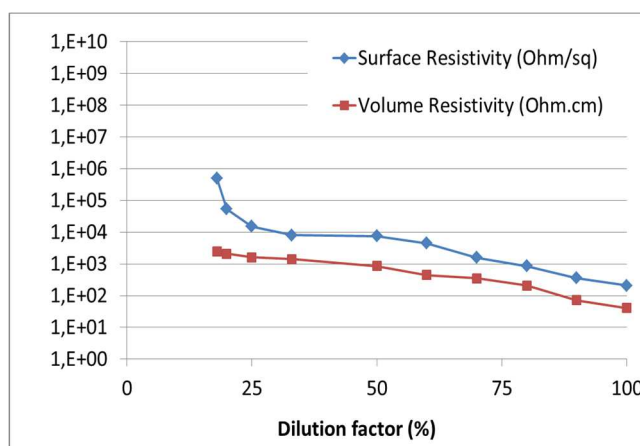
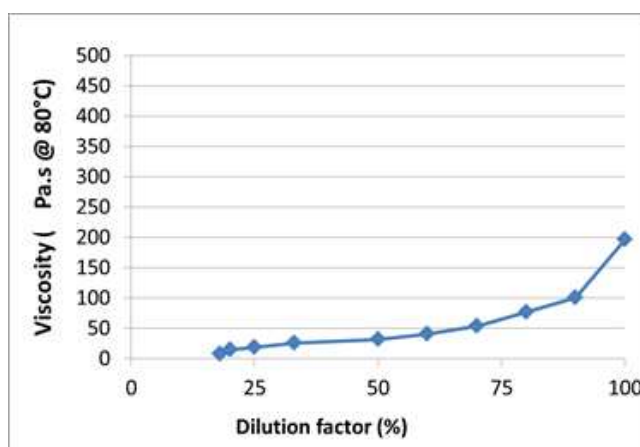
The following table shows the main characteristics of the **virgin Polyester Polyol**:

| Molecular Weight<br>(g/mol) | OH content<br>(mg KOH/g) | Viscosity<br>(mPa.s 75°C) |
|-----------------------------|--------------------------|---------------------------|
| 2000                        | 55                       | 580                       |

### General Processing Guidelines

Common dilution equipment of ELASTOCYL™ X1-Polyester Polyol MB could be used to prepare the dilution. Figure 1 shows how viscosity and resistivity are impacted in function of the dilution factor.

Figure 1. Viscosity and resistivity impact in function of the dilution.



Dilution factor means that X % of Elastocyl X1-Polyester Polyol MB has been used in another polymer matrix. A dilution factor of 100% means the use of the Elastocyl X1-Polyester Polyol MB masterbatch without any dilution. Dilution factor to use will depend on the targeted mechanical and electrical properties. Do not hesitate to contact us.

## Commercial/Safety Information

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### Packaging

ELASTOCYL™ X1-Polyester Polyol MB is available in metallic drum (5, 10 or 20 kg).

### Minimum Order of Quantity

Nanocyl's minimum order of quantity for ELASTOCYL™ X1-Polyester Polyol MB is 1 kg.

### Custom Grades

Besides the commercial grades, Nanocyl is able to toll-compound any type of polyol or polyurethane masterbatches to meet its clients' needs.

### Health and Safety

A Material Safety Data Sheets (MSDS) is available to provide both workers and emergency personnel with the proper procedures for handling or working with the ELASTOCYL™ X1-Polyester Polyol MB. This MSDS includes information such as physical data (form and color, melting point, etc.), handling and storage recommendations, first aid measures and ecological information. The Safety Data Sheet is provided with any order and should be observed.

## Disclaimer

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