



Overview

Durethane® C uses our patented metal salt technology to achieve conductivity in our high-performance polyurethane materials. By integrating our metal salts into the backbone of the polymer we achieve uniformity of conductivity throughout the material, without sacrificing its performance or physical properties.

Benefits

- Maintains consistent conductivity levels over time & wear
- Leaves no marks or residues on contact surfaces
- Does not contaminate electronic or mechanical devices with shed particles
- Longer product or component life by preventing glazing or leaching
- Can be made into solid or foam polyurethane materials

Applications

Durethane® C is ideal for dissipating static build-up that may cause damage in an operation, or to transfer an electrical charge. This powerful combination of electrical conductivity and durable material properties make Durethane® C ideal for a variety of applications, including:

- Medical Devices
- Cleanroom Systems
- Conveyance Systems
- Digital Printing & Imaging
- Currency Handling
- Electronics and Electronics Manufacturing

Physical Properties

Our trade-secret formulations allow us to achieve a wide range of physical properties, including:

- Volume resistivity ranges from $5 \times 10^5 \Omega \text{cm}$ to $7 \times 10^{15} \Omega \text{cm}$
- Hardness range from Shore 20A to 70D¹
- Tensile modulus range from 250 PSI to 7000 PSI²
- Tear strength range from 50 to 400²
- Compression set range from 5% to 40%³

¹ASTM D2240, Shore A, D

²ASTM D3574A

³ASTM D395B @ 158F, 22HRS

Typical Physical Properties, Materials Formulated from Durethane® C

Name	Hardness	Backbone	Tensile Strength	Elongation	Tear Strength	Compression Set	Available for Durethane® Standard Shapes
	Shore A or D	TDI or MDI	PSI	%	DIE-C (PLI)	%	---
DSC220A	20A		325	550	55	10	✓
DSC225A	25A		500	575	70	9	✓
DSC230A	30A		1000	625	80	8	✓
DSC330A	30A		250	160	50	8	✓
DSC235A	35A		1500	650	100	7	✓
DSC335A	35A		325	170	55	7	✓
DSC240A	40A		2000	675	125	6	✓
DSC340A	40A		425	180	60	6	✓
DSC245A	45A		2700	700	150	5	✓
DSC345A	45A		475	190	65	5	✓
DSC250A	50A		3200	775	175	5	✓
DSC350A	50A		5200	200	70	5	✓
DSC255A	55A		3750	850	200	5	✓
DSC355A	55A		575	225	75	5	✓
DSC260A	60A		3750	850	200	5	N/A
DSC270A	70A		5000	800	250	30	✓
DSC370A	70A		2000	450	200	20	✓
DSC275A	75A		6000	700	325	32	✓
DSC280A	80A		7000	550	400	35	✓
DSC385A	85A		3000	700	275	40	✓
DSC390A	90A		5200	430	400	32	✓
DFC640A	40A		900	700	100	N/A	N/A
DFC750A	50A		800	330	130	N/A	N/A

LEDGEND



MDI Ether



MDI Ester



TDI Ether



TDI Ester

Note: The above physical properties are estimated with a volume resistivity level of 1E8 Ωcm