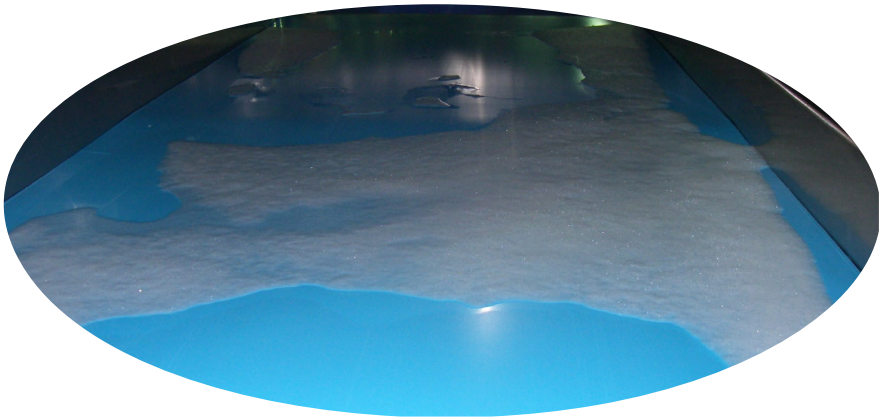
CHEMICAL RESISTANCE

November 2016

Chemical Resistance Guide for Lightweight Conveyor Belting



belting systems

This chemical resistance chart is printed as a general reference guide only and is applicable only for cover compounds. Each application has unique circumstances that may alter the results as printed herein. No guarantee of chemical resistance is given or implied.

The resistance of lightweight belting to the following chemicals can be enhanced by reducing product temperature, chemical concentration and the length of exposure to the chemicals.

Materials

Physical Properties	Standard PVC	Food Grade PVC	RMV	Urethane	SBR	Nitrile/Butyl	Teflon Coated Rubber	Silicone	Natural Rubber	Co-polyester
Abrasion	○	○	◑	●	◑	◑	○	○	●	●
Cut Resistance	○	○	○	●	◑	◑	○	○	◑	◑
Oil Resistance	○	◑	◑	●	○	◑	●	●	○	●
Heat Resistance Temperature	◑	◑	◑	◑	◑	◑	●	●	○	◑
Heat Resistance Duration	○	○	○	◑	◑	◑	◑	◑	○	◑
Tear Resistance	○	○	○	●	◑	◑	◑	○	●	◑
Puncture Resistance	◑	◑	◑	●	◑	◑	◑	◑	●	◑
Ozone Resistance	○	○	○	◑	○	◑	◑	◑	○	◑
Release	◑	◑	◑	◑	◑	◑	●	●	◑	◑
Flexibility	◑	◑	◑	◑	◑	◑	◑	◑	●	◑
Tensile Strength	○	○	○	●	◑	◑	◑	◑	●	●
Weathering Resistance	◑	◑	◑	◑	●	◑	●	●	○	◑
Resiliance (snap back)	◑	◑	◑	◑	◑	◑	◑	◑	●	◑
Grip	◑	◑	◑	◑	◑	◑	◑	◑	●	◑

● *Superior* ◑ *Very Good* ◑ *Good* ○ *Poor*

Resistance Ratings

A - Excellent - (Chemical causes no harmful effects to material)

B - Good - (Chemical will cause limited degradation to material depending on exposure and potency)

C - FAIR - (Used for superficial cleaning/sanitizing only.)

D - Not Recommended - (Chemical causes serious degradation to material)

*** - No Data**

CHEMICAL	Standard PVC	RMV & Food Grade PVC	Urethane	SBR	Nitrile/Butyl	Teflon Coated Rubber	Silicone	TK Polyurethane	Co-polyester
Acetic Acid (3%, also Vinegar)	B	B	A	C	A	A	B	A	A
Acetone	D	D	D	C	C	B	B	D	C
Ammonium Chloride	C	B	C	C	B	B	B	B	C
Ammonium Hydroxide	C	C	C	C	C	B	B	C	B
Ammonium Phosphate	B	B	B	B	B	A	A	A	A
Ammonium Sulphate	C	C	B	C	B	A	A	A	B
Animal Oils & Fats	C	B	A	C	A	A	A	A	A
Asphalt	C	B	A	C	B	A	A	B	A
Barium Sulfide	B	B	A	B	A	A	A	A	A
Beer	B	A	A	B	A	A	A	A	A
Beet Sugar Liquors	B	A	A	B	A	A	A	A	A
Borax	B	B	A	B	A	A	A	A	A
Boric Acid	B	B	A	C	A	A	B	A	A
Butter	B	A	A	C	A	A	A	A	A
Calcium Chloride	B	B	B	B	B	A	A	B	B
Calcium Hydroxide	C	C	B	C	A	A	A	B	A
Cane Sugar	A	A	A	A	A	A	A	A	A
Carbon Dioxide	A	A	A	A	A	A	A	A	A
Castor Oil	C	B	A	C	A	A	A	A	A
Cheese	B	A	A	B	A	A	A	A	A
Citric Acid	A	B	A	C	B	A	A	A	A
Coconut Oil	C	B	A	C	A	A	A	A	A
Copper Chloride	A	B	B	B	B	A	A	A	B
Copper Sulphate	B	B	A	B	B	A	A	A	A
Corn Oil	B	A	A	C	A	A	A	A	A
Cottonseed Oil	C	B	A	C	A	A	A	A	A
Creosote	C	B	A	C	B	A	A	A	A
Cyclohexane	C	C	B	C	B	A	A	B	A
Cyclohexanone	C	C	C	C	C	B	B	C	B
Denatured Alcohol	B	B	A	C	B	A	A	A	A

CHEMICAL	Standard PVC	RMV & Food Grade PVC	Urethane	SBR	Nitrile/Butyl	Teflon Coated Rubber	Silicone	TK Polyurethane	Co-polyester
Diesel Oil	C	C	B	C	B	A	A	B	A
Ethanol	C	C	B	C	C	A	A	B	A
Fertilizer	B	B	B	C	B	A	A	B	B
Fish Oil	C	B	A	C	A	A	A	A	A
Flour	A	A	A	A	A	A	A	A	A
Formaldehyde (40%)	C	C	B	C	B	A	A	B	B
Fruit Acids	A	A	A	B	A	A	A	A	A
Fuel Oil	C	C	B	C	B	A	A	B	A
Gasoline	C	C	B	C	B	A	A	B	A
Glucose	A	A	A	B	A	A	A	A	A
Glycerin	A	A	A	B	A	A	A	A	A
Hexane	C	C	A	C	B	A	A	A	A
Hydraulic Oils	C	C	B	C	C	A	B	B	B
Hydrochloric Acid (3%)	C	C	B	C	B	A	B	B	B
Isopropyl Alcohol	C	B	B	C	B	A	A	B	A
Kerosene	B	C	B	B	B	A	A	B	A
Lacquer Solvents	C	C	C	C	C	A	B	C	B
Lactic Acid	B	B	A	C	B	A	A	A	A
Lard	C	B	A	C	A	A	A	A	A
Lineolic Acid	B	B	B	C	B	A	B	B	B
Linseed Oil	C	B	B	C	B	A	A	B	A
Lubricating Oils	C	C	B	C	B	A	A	B	B
Meat & Bone Meal	B	A	A	B	A	A	A	A	A
Methyl Alcohol (Methanol)	C	B	B	C	B	A	A	B	A
Methyl Ethyl Ketone (MEK)	C	C	C	C	C	A	B	C	C
Methylene Chloride	C	C	C	C	C	A	B	B	C
Milk	B	A	A	C	A	A	A	A	A
Mineral Oils	C	B	A	B	A	A	A	A	A
Mineral Spirits	C	B	B	C	B	A	A	B	A
Molasses	A	A	A	B	A	A	A	A	A
Mustard	B	A	A	B	A	A	A	A	A
Nut Oil	C	B	A	C	A	A	A	A	A
Oleic Acid	C	C	B	C	B	A	B	B	A
Olive Oil	C	B	A	C	A	A	A	A	A
Ozone	C	C	C	C	C	C	C	C	C
Palm Kernel Oil	C	C	A	C	A	A	A	A	A
Peanut Oil	C	B	A	C	A	A	A	A	A
Pentane	C	C	B	C	B	A	A	B	A

A - Excellent

B - Good

C - Fair

D - Not Recommended

*** - No Data**

CHEMICAL	Standard PVC	RMV & Food Grade PVC	Urethane	SBR	Nitrile/Butyl	Teflon Coated Rubber	Silicone	TK Polyurethane	Co-polyester
Paraffin	A	A	A	A	A	A	A	A	A
Pickling Solution (1% Nitric Acid, 4% HF)	B	B	B	C	B	A	A	B	B
Rosemary Oil	C	B	A	C	A	A	A	A	A
Salt Water	A	A	A	A	A	A	A	A	A
Shellac	C	C	C	C	C	A	B	C	C
Silicone (Siloxane)	A	A	A	A	A	A	A	A	A
Soap Solutions	B	B	A	B	A	A	A	A	A
Sodium Chloride (25%)	B	B	B	B	B	A	A	B	A
Sodium Hydroxide (3%) (Lye)	C	C	B	C	C	B	B	B	B
Sodium Hypochlorite (3%) (Bleach)	C	C	B	C	C	B	B	B	B
Sourkraut	B	B	A	C	A	A	B	A	A
Soy Bean Oil	C	B	A	C	A	A	A	A	A
Steam (212˚F - 100˚C)	B	B	C	B	A	A	A	C	A
Steam (230˚F - 110˚C)	C	C	C	C	B	A	A	C	A
Sulphuric Acid (3%)	C	C	C	C	C	B	B	C	B
Sugar	A	A	A	A	A	A	A	A	A
Tar	C	B	A	C	B	A	A	A	A
Tobacco	D	D	D	D	D	D	D	D	A
Toluene	C	C	C	C	C	A	A	C	B
Tomato Juice	B	B	A	B	A	A	A	A	A
Tomatoes, Ketchup	A	A	A	A	A	A	A	A	A
Trisodium Phosphate	B	B	A	B	A	A	A	A	A
Tung Oil	C	B	A	C	A	A	A	A	A
Turpentine	C	B	B	C	B	A	A	B	B
Urine	B	B	A	C	B	A	A	A	A
Vegetable Oils & Fats	C	B	A	C	A	A	A	A	A
Vinegar	B	B	A	C	A	A	B	A	A
Water (72˚F - 22˚C)	A	A	A	A	A	A	A	A	A
Water (158˚F - 70˚C)	A	A	A	A	A	A	A	A	A
Water (212˚F - 100˚C)	B	B	C	B	A	A	A	C	A
Whiskey & Wine	C	B	A	C	B	A	A	A	A

A - Excellent

B - Good

C - Fair

D - Not Recommended

*** - No Data**

Perfecting Motion.

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