Lumax Pumps - Chemical Compatibility Chart



Caution: The Materials List below is to be referred for guidance only in selecting equipment for appropriate chemical compatibility. ALWAYS test your equipment under the specific conditions of your application before permanent installation. Ratings of chemical behavior listed in this manual apply at a 48 hour exposure period. Lumax has no knowledge of possible effects beyond this period. All recommendations are based on room temperature (72°F/22°C) exposure. Compatibility results may deviate from these recommendations at elevated temperatures. Recommendations are based on presence of listed chemical only. Mixtures containing more than one chemical can greatly affect chemical compatibility. Polypropylene products and components should not be used with low flash point chemicals, regardless of chemical compatibility results. Failure, improper selection, or improper use of the products referred to and described herein or related items can cause severe personal injury or property damage. This document provides product options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system.

Ratings: Chemical Effect		Good				Lumax	Pump	Mode	ı			Not R	ecomn	nended	d
Chemical	LX-1300 LX-1301		LX-1316	LX-1318	LX-1320	LX-1321	LX-1322	LX-1323	LX-1324	LX-1326	LX-1327	LX-1328	LX-1329	LX-1330	LX-1331
Acetaldehyde															
Acetic Acid 20-50%															
Acetic Anhydride															
Acetone															
Alcohol: Amyl															
Alcohol: Benzyl															
Alcohol: Butyl															
Alcohol: Diacetone															
Alcohol: Ethyl (Ethanol)															
Alcohol: Hexyl (1•Hexanol)															
Alcohol: Isobutyl															
Alcohol: Isopropyl															
Alcohol: Methyl (Methanol)															
Alcohol: Propyl															
Aluminum Sulfate															
Ammonia, Anhydrous															
Ammonia Liquids															
Ammonium Hydroxide															
Anti-Freeze (Alcohol Base)															
Anti-Freeze (Glycol Base)															
Benzene															
Benzoic Acid															
Bleach Solutions															
Boric Acid - 30%															
Brake Fluid (Hexylene Glycol)															
Calcium Carbonate															
Calcium Chloride															
Calcium Hypochlorite - 20%															
Calcium Sulfate															
Chlorine, Wet															
Clorox [®]															
Citric Acid															
Copper Chloride															
Copper Sulfate															
Detergent Solutions															

Lumax Pumps - Chemical Compatibility Chart



Ratings: Chemical Effect		Good				Lumax	Pump	Mode	ı			Not R	ecomn	nender	4
Ratings. One inical Effect	0 +		9	8						9	7				
Chemical	LX-1300 LX-1301	LX-1302 LX-1304	LX-1316	LX-1318	LX-1320	LX-1321	LX-1322	LX-1323	LX-1324	LX-1326	LX-1327	LX-1328	LX-1329	LX-1330	LX-1331
Diesel Oil (Fuel ASTM #2)															
Ethyl Acetate															
Ethylene Glycol															
Formaldehyde															
Formic Acid															
Fruit Juices															
Fuel Oils (ASTM #1 thru #9)															
Gasoline (Unleaded)															
Gasoline (Petrol)															
Glycerol (Glycerine)															
Grease															
Heptane (Brake Cleaner)															
Hexane															
Hexyl Alcohol (Hexanol)															
Hexylene Glycol (Brake Fluid)															
Hydraulic Oil															
Hydrochloric Acid - 20%															
Hydrochloric Acid - 30%															
Hydrogen Peroxide - 30% Isobutyl Alcohol															
Isopropyl Alcohol															
Jet Fuels (JP1 to JP6)															
Kerosene															
Lacquers															
Lacquer Solvents															
Lactic Acid															
Lubricating Oils (Petroleum)															
Methyl Ethyl Ketone															
Mineral Oil (Petroleum)															
Motor Oil															
Naphtha															
Nitric Acid - 50%															
Oils, Animal															
Oils, Mineral															
Oils, Vegetable															
Oxalic Acid															
Petroleum (Crude Oil)															
Phosphoric Acid - 50%															
Photographic Developer															
Potassium Chloride															
Potassium Hydroxide (Caustic Potash)															
Propylene Glycol															

Lumax Pumps - Chemical Compatibility Chart



Define Objected Effect							D	Mada				h			
Ratings: Chemical Effect	I _	Good		I		Lumax		ı	ı —	l			I	nende	1
Chemical	LX-1300 LX-1301	LX-1302 LX-1304	LX-1316	LX-1318	LX-1320	LX-1321	LX-1322	LX-1323	LX-1324	LX-1326	LX-1327	LX-1328	LX-1329	LX-1330	LX-1331
Salt Water (Brine)															
Sea Water (Brine)															
Silicone Oils															
Soap Solutions															
Soda Ash (Sodium Carbonate)															
Sodium Bicarbonate															
Sodium Chlorate															
Sodium Chloride															
Sodium Chromate															
Sodium Hydroxide - 50%															
Sodium Hypochlorite (Bleach)															
Sodium Nitrate															
Sodium Nitrite															
Sodium Peroxide															
Sodium Phosphate															
Sodium Silicates															
Sodium Sulfate															
Sodium Sulfide															
Sodium Sulfite															
Stearic Acid															
Stoddard Solvent															
Sulfuric Acid - 75%															
Tallow															
Toluene, Toluol															
Transformer Oil															
Transmission Fluid (Type A)															
Trichlorethane															
Trichlorethylene															
Turpentine															
Urea/DEF/Ad Blue															
Varnish															
Vegetable Juices															
Vegetable Oils															
Vinegar															
Water, Distilled (Deionized)															
Water, Fresh															
Wines															
Xylene															
Zinc Chloride															
Zinc Sulfate															

WARNING: Although Gasoline is oil based, it is Explosive & Extremely Dangerous to pump. Ground Wires are essential and required for Gasoline and Flammables

Lumax Pumps Chemical Compatibility Chart



Ratings: Chemical Effect		Good				Lumax	c Pump	Model						comme	ended
Chemical	LX-1332	LX-1334	LX-1336	LX-1337	LX-1338	LX-1339	LX-1341	LX-1342	LX-1344	LX-1345	LX-1348	LX-1352	LX-1360	LX-1361 LX-1362	LX-1363
Acetaldehyde															
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Calcium Sulfate															
Chlorine, Wet															
Clorox®															
Citric Acid															
Copper Chloride															
Copper Sulfate															
Detergent Solutions															
Diesel Oil (Fuel ASTM #2)															
Ethyl Acetate															
Ethylene Glycol															
Formaldehyde															
Formic Acid															
Fruit Juices															
Fuel Oils (ASTM #1 thru #9)															

Lumax Pumps Chemical Compatibility Chart

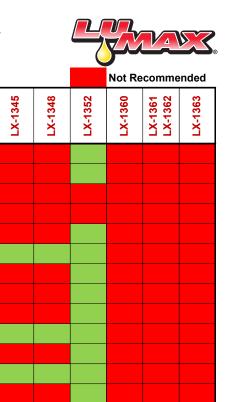


Ratings: Chemical Effect		Good				Lumax	c Pump	Model				Not Recommended				
Chemical	LX-1332	LX-1334	LX-1336	LX-1337	LX-1338	LX-1339	LX-1341	LX-1342	LX-1344	LX-1345	LX-1348	LX-1352	LX-1360	LX-1361 LX-1362	LX-1363	
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Oils, Animal																
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Potassium Chloride																
Potassium Hydroxide (Caustic Potash)																
Propylene Glycol																
Salt Water (Brine)																
Sea Water (Brine)																
Silicone Oils																
Soap Solutions																
Soda Ash (Sodium Carbonate)																
Sodium Bicarbonate																
Sodium Chlorate																

Lumax Pumps Chemical Compatibility Chart

Lumax Pump Model

Good



Chemical	LX-1332	LX-1334	LX-1336	LX-1337	LX-1338	LX-1339	LX-1341	LX-1342	LX-1344	LX-1345	LX-1348	LX-1352	LX-1360	LX-1361 LX-1362	LX-1363
Sodium Chloride															
Sodium Chromate															
Sodium Hydroxide - 50%															
Sodium Hypochlorite (Bleach)															
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Vegetable Oils															
Vinegar															
Water, Distilled (Deionized)															
Water, Fresh															
Wines															
Xylene															
Zinc Chloride															
Zinc Sulfate															

Approximate Viscosities of Common Materials (at Room Temp. 70°F/ 20°C)

Material	Viscosity in Centipoise (cPs)	Viscosity in Saybolt Universal (SSU)
Water	1 cPs	31 SSU
Milk	3 cPs	36 SSU
SAE 10 Motor Oil	85-140 cPs	455-690 SSU
SAE 20 Motor Oil	140-420 cPs	690-2,050 SSU
SAE 30 Motor Oil	420-650 cPs	2,050-3,140 SSU
SAE 40 Motor Oil	650-900 cPs	3,140-4,300 SSU

Ratings: Chemical Effect

Material	Viscosity in Centipoise (cPs)	Viscosity in Saybolt Universal (SSU)
Castrol Oil	1,000 cPs	4,600 SSU
Karo Syrup	5,000 cPs	23500 SSU
Honey	10,000 cPs	46500 SSU
Chocolate	25,000 cPs	115000 SSU
Ketchup	50,000 cPs	231000 SSU
Mustard	70,000 cPs	323500 SSU
Sour Cream	100,000 cPs	462000 SSU