

# Corrosion Resistance Data for the Durco BX2001 Epoxy Fiberglass Bearing

**T**he corrosion information in this bulletin is intended to be a guide for the selection of the Durco BX2001 epoxy fiberglass bearing for a given application.



The ratings may be used as a guide for material selection but should not be considered a guarantee or blanket recommendation. The ratings are the compilation of published data and best judgment. Many factors must be considered when selecting a non-metallic material for a corrosive service. These include: concentration of chemicals present; harmful contaminants; velocity; solids in suspension; type of design of equipment; continuous or intermittent operation; maximum, minimum and normal operating temperatures; and any other peculiarities characteristic of the solution.

Key To Ratings		Media	Rating
A =	<10% swelling, <15% loss in tensile strength, little or no chemical attack	Bromine, dry	NR
B =	<15% swelling, <30%, good chemical resistance	Bromine, wet	NR
C =	<20% swelling, <50%, limited corrosion resistance	Calcium bisulfite	A to 185°F
NR =	>20% swelling, <50%, attacked or dissolved	Calcium chloride	A saturated to 185°F
		Calcium hydroxide (lime)	A to 30% to 140°F
		Calcium hypochlorite	A to 140°F
		Calcium sulfate	A to 185°F
		Carbon disulfide	A/C to 70°F
		Carbonic acid	A/B to 185°F
		Carbon tetrachloride	A/NR to 140°F
		Chlorinated water	A to 150°F
		Chlorine gas	C/NR at 70°F
		Chloroacetic acid	C/NR at 70°F
		Chromic acid	B to 5% to 80°F
		Citric acid	A to 185°F
		Copper nitrate	A to 185°F
		Copper sulfate	A to 185°F
		Cupric chloride	A 100% to 185°F
		Ethylene dichloride	A/NR to 140°F
		Fatty acids	A to 140°F
		Ferric chloride	A saturated to 185°F
		Ferric nitrate	A 100% to 185°F
		Ferric sulfate	A 100% to 185°F
		Ferrous sulfate	A 100% to 200°F
		Formaldehyde	B 100% at 122°F
		Formic acid	A to 20% at 70°F
		Glycol	A to 200°F
		Hydrochloric acid	A to 37% to 140°F
<b>Media</b>	<b>Rating</b>		
Acetate solvents	A to 140°F		
Acetic acid	A to 20% to 70°F		
Acetic anhydride	A to 140°F		
Alum	A 10% to 212°F		
Aluminum chloride	A/B to 10% to 200°F		
Ammonium chloride	A to 10% to 140°F		
Ammonium fluoride	A to 25% to 150°F		
Ammonium hydroxide	A to 20% to 150°F		
Ammonium nitrate	A to 140°F		
Ammonium phosphate	A saturated to 140°F		
Ammonium sulfate	A saturated to 185°F		
Aniline dyes	B/C to 70°F		
Aniline hydrochloride	NR		
Arsenic acid	A to 140°F		
Barium chloride	A to 30% to 185°F		
Barium nitrate	B to 140°F		
Barium sulfate	A to 140°F		
Benzoic acid	A to 185°F		
Boric acid	A to 100% to 185°F		

# Corrosion Resistance Guide

Media	Rating	Media	Rating
Hydrofluoric acid	A to 2% to 120°F	Sodium bisulfite	A to 140°F
Hydrofluosilicic acid	A/B to 10 to 120°F	Sodium chlorate	A to 200°F
Hydrogen peroxide	A/B 50% to 140°F	Sodium chloride	A to 200°F
Hypochlorite bleach	NR	Sodium ferricyanide	A to 200°F
Iodine, dry	B/NR to 140°F	Sodium hydroxide	A 5% to 122°F
Lactic acid	A/B to 150°F	Sodium hydroxide, fused	NR
Lead acetate	A/B to 200°F	Sodium hypochlorite	NR
Magnesium chloride	A to 200°F	Sodium nitrate	A to 200°F
Magnesium sulfate	A to 200°F	Sodium phosphate	A/NR to 140°F
Maleic acid	A to 150°F	Sodium sulfate	A to 185°F
Mercuric chloride	A to 70°F	Sodium sulfide	A to 185°F
Mercuric nitrate	A/B to 70°F	Sodium sulfite	A to 70°F
Nickel chloride	A to 200°F	Sodium thiosulfate	A to 150°F
Nickel sulfate	A to 185°F	Stannic chloride	A to 200°F
Nitric acid	A 10% to 140°F	Stannous chloride	A to 70°F
Nitrobenzene	B/C to 70°F	Stearic acid	A/B to 140°F
Oleic acid	A to 200°F	Sulfite liquors	NR
Oleum	NR	Sulfur	A to 150°F
Oxalic acid	A to 200°F	Sulfur chloride	C to 140°F
Phosphoric acid	A to 50% to 160°F	Sulfur dioxide	B at 122°F
Picric acid	A to 70°F	Sulfuric acid	A 10% to 150°F
Potassium chloride	A to 200°F	Sulfuric acid, 60-100%	NR
Potassium hydroxide	A 45% to 180°F	Sulfurous acid	A to 150°F
Potassium nitrate	A to 200°F	Tannic acid	A to 200°F
Potassium sulfate	A to 185°F	Tartaric acid	A to 185°F
Pyridine	A to 140°F	Toluene	B to 70°F
Sea water	A to 200°F	Zinc chloride	A to 200°F
Sodium bicarbonate	A to 185°F	Zinc sulfate	A to 200°F
Sodium bisulfate	A to 200°F		

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