



# CHEMICAL RESISTANCE GUIDE

FOR MICROFLEX & HIGH FIVE LATEX AND NITRILE GLOVES

CHEMICALS	LATEX	NITRILE
Acetaldehyde	FAIR	NOT RECOMMENDED
Acetamide	NOT RECOMMENDED	EXCELLENT
Acetic Acid (60%)	GOOD	GOOD
Acetone	NOT RECOMMENDED	NOT RECOMMENDED
Acetonitrile	GOOD	NOT RECOMMENDED
Acetophenone	NOT RECOMMENDED	NOT RECOMMENDED
Acetyl chloride	NOT RECOMMENDED	NOT RECOMMENDED
Acrylamide (same as 2-Propenamido)	NO DATA	NO DATA
Acrylic Acid	GOOD	FAIR
Aircraft Stripper	NOT RECOMMENDED	GOOD
Aluminum Nitrate (Nonhydrous) (10%)	GOOD	GOOD
Ammonia (Anhydrous)	NOT RECOMMENDED	GOOD
Ammonium Benzoate (same as Benzoic Acid)	NOT RECOMMENDED	NOT RECOMMENDED
Ammonium Hydroxide (30%)	GOOD	EXCELLENT
Ammonium Hydroxide (Concentrated)	NOT RECOMMENDED	NOT RECOMMENDED
Ammonium Oxalate	NO DATA	EXCELLENT
Ammonium Sulfate (Aqueous)	EXCELLENT	EXCELLENT
Amyl Acetate	NOT RECOMMENDED	NOT RECOMMENDED
Aniline	NOT RECOMMENDED	NOT RECOMMENDED
Antifreeze (Methanol-Based)	EXCELLENT	EXCELLENT
Benzaldehyde	NOT RECOMMENDED	NOT RECOMMENDED
Benzene	NOT RECOMMENDED	NOT RECOMMENDED
Benzoic Acid	NOT RECOMMENDED	NOT RECOMMENDED
Boric Acid	EXCELLENT	EXCELLENT
Brake Cleaner (containing Hexane or Ethanol)	NOT RECOMMENDED	NOT RECOMMENDED
Brake Cleaner, Non-Chlorinated (containing Acetone, N-Heptane and/or Xylene)	NOT RECOMMENDED	NOT RECOMMENDED
Brake Fluid	GOOD	GOOD
Bromine (Anhydrous Liquid)	NOT RECOMMENDED	NOT RECOMMENDED
Bromoethane (Methyl Bromide)	NOT RECOMMENDED	NOT RECOMMENDED
Butyl Acetate	NOT RECOMMENDED	NOT RECOMMENDED
n-Butyl Alcohol (Propyl Carbinal)	GOOD	EXCELLENT
n-Butyl Chloride	NOT RECOMMENDED	NOT RECOMMENDED
1, 3-Butylene Glycol (1,3-Butanediol)	NO DATA	GOOD
Calcium Chloride (Aqueous)	EXCELLENT	EXCELLENT
Calcium Hydroxide (Dental)	EXCELLENT	EXCELLENT
Carbamide Peroxide (Urea+Hydrogen Peroxide at 1:1 ratio)	GOOD	FAIR
Carbon Dioxide	GOOD	EXCELLENT
Carbon Disulfide	NOT RECOMMENDED	NOT RECOMMENDED
Carbon Tetrachloride	NOT RECOMMENDED	GOOD
Carburetor Cleaner (typically Xylene, Toluene and/or Acetone)	NOT RECOMMENDED	NOT RECOMMENDED

CHEMICALS	LATEX	NITRILE
Castor Oil	EXCELLENT	EXCELLENT
Chlorine (wet)	NOT RECOMMENDED	NOT RECOMMENDED
Chlorobenzene	NOT RECOMMENDED	NOT RECOMMENDED
Chloroform	NOT RECOMMENDED	NOT RECOMMENDED
o-Chloronaphthalene	NOT RECOMMENDED	NOT RECOMMENDED
Chromic Acid (60%)	NOT RECOMMENDED	FAIR
Citric Acid (10%)	EXCELLENT	EXCELLENT
Clonidine Hydrochloride (0.1%)	NO DATA	NO DATA
Cresols	NOT RECOMMENDED	NOT RECOMMENDED
Cupric Sulfate (Copper Sulfate)	GOOD	EXCELLENT
Cyanic Compounds	NO DATA	FAIR
Cyclohexane	NOT RECOMMENDED	EXCELLENT
Cyclohexanol	FAIR	GOOD
Cyclohexanone	NOT RECOMMENDED	NOT RECOMMENDED
Decahydronaphthalene (Decalin)	NOT RECOMMENDED	NOT RECOMMENDED
Denatured Alcohol	EXCELLENT	EXCELLENT
Dental Etching Material	GOOD	GOOD
Dental Resin Cement	FAIR	NO DATA
Dental Waxes	NOT RECOMMENDED	EXCELLENT
Denture Polishing Material	NOT RECOMMENDED	GOOD
Detergent Solutions	GOOD	EXCELLENT
Developing Fluids	EXCELLENT	EXCELLENT
Diamond Polishing Paste	GOOD	GOOD
Dibutyl Phthalate	NOT RECOMMENDED	NOT RECOMMENDED
o-Dichlorobenzene	NOT RECOMMENDED	NOT RECOMMENDED
p-Dichlorobenzene	NOT RECOMMENDED	NOT RECOMMENDED
Dichloromethane	NOT RECOMMENDED	NOT RECOMMENDED
Diesel Fuel	NOT RECOMMENDED	GOOD
Diesel Fuel Additive	NOT RECOMMENDED	GOOD
Diethylamine	FAIR	FAIR
Diethylene Glycol	EXCELLENT	EXCELLENT
Diisobutyl Ketone (DIBK)	NOT RECOMMENDED	NOT RECOMMENDED
N, N-Dimethyl Acetamide (same as Dimethyl Acetamide (DMAC), same as Acetic Acid)	GOOD	GOOD
Dimethylformamide	NOT RECOMMENDED	GOOD
Dimethyl Sulfoxide (DMSO)	NOT RECOMMENDED	NOT RECOMMENDED
Diocetyl Phthalate (DOP)	NOT RECOMMENDED	NOT RECOMMENDED
Dioxane	NOT RECOMMENDED	NOT RECOMMENDED
EDTA (17%)	GOOD	GOOD
Engine Cleaner & Degreaser (containing Kerosene, Petroleum Distillates or Propane-Isobutane-n-Butane as main components)	NOT RECOMMENDED	GOOD
Epoxy Primer (containing Toluene, Acetone, MEK and/or n-Butyl Acetate)	NOT RECOMMENDED	NOT RECOMMENDED

EXCELLENT	GOOD	FAIR	NOT RECOMMENDED	NO DATA
CHEMICAL RATING KEY				

GENERAL INFORMATION AND CAUTIONS: YOUR UNDERSTANDING OF HOW TO USE THIN-FILM GLOVES IS EXTREMELY IMPORTANT TO YOUR SAFETY. Microflex® and HIGH FIVE® gloves are intended for use as protection against incidental exposure to chemicals and other harmful substances. These gloves do not offer protection against all chemicals under all conditions, and are not designed to provide protection against prolonged or continuous exposure to harmful substances. As a precaution, glove users are advised to change gloves immediately upon exposure to harmful substances. It is the responsibility of the user to choose the appropriate glove type, thickness and to change gloves as they become contaminated. This Chemical Resistance Chart is offered as a guide and for reference purposes only. The chemical resistance ratings are based on published research data. Microflex cannot certify the accuracy of the data and therefore does not

represent nor warrant that the information in the chemical resistance chart is accurate or complete. Microflex® and HIGH FIVE® gloves have NOT been individually tested against the chemicals contained in this chart. The barrier properties of each glove type may be affected by differences in material thickness, chemical concentration, temperature, and length of exposure to chemicals. If you ever have a problem, or have any questions about your Microflex® and HIGH FIVE® gloves, our Customer Service team is ready to assist you. Microflex® exam gloves meet or exceed all current medical grade examination glove standards imposed by the ASTM International and the Food and Drug Administration (FDA). At 1.5 AQL, our gloves meet or exceed new AQL standards.



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CHEMICALS	LATEX	NITRILE	CHEMICALS	LATEX	NITRILE
Ethanol (Ethyl Alcohol) (95%)	Green	Green	Hydrogen Peroxide (30%)	Green	Red
Ethanolamine	Green	Green	Hydrogen Peroxide (Concentrated)	Red	Red
Ether	Red	Red	Hydroquinone	Green	Yellow
Ethidium Bromide (0.5%)	Grey	Grey	Hydroxylamine Hydrochloride	Grey	Grey
2-ethoxyethanol (Ethoxyethanol)	Green	Blue	Imidazole	Grey	Grey
Ethyl Acetate	Red	Red	Isobutanol (Isobutyl Alcohol)	Blue	Green
Ethyl Ether	Red	Red	Isooctane	Red	Blue
Ethylene Dichloride	Red	Red	Isopropanol (Isobutyl Alcohol)	Blue	Blue
Ethylene Glycol	Blue	Blue	Kerosene	Red	Blue
Ethylene Oxide	Red	Red	Ketones	Green	Red
Ferric Chloride (Aqueous)	Blue	Blue	Lacquers	Red	Red
Formaldehyde	Green	Green	Lacquer Thinners	Red	Red
Formalin (40% of Formaldehyde)	Green	Green	Lactic Acid (85%)	Blue	Blue
Formamide	Grey	Blue	Laurel Alcohol (Lauryl Alcohol)	Blue	Blue
Formic Acid (90%)	Green	Green	Lauric Acid (39%)	Red	Red
Freon 11	Red	Green	Lead Acetate	Blue	Green
Freon 12	Red	Green	Linoleic Acid	Red	Green
Freon 21	Red	Red	Linseed Oil	Red	Green
Freon 22	Red	Red	Lubricants (containing Mineral Spirits as primary component)	Red	Blue
Fuel injector cleaner (primarily Kerosene)	Red	Green	Maleic Acid	Yellow	Yellow
Furfural	Red	Red	2-Mercaptoethanol	Grey	Grey
Gasoline, Leaded	Red	Blue	Mercuric Chloride	Blue	Blue
Gasoline, Unleaded	Red	Blue	Mercury	Blue	Blue
Glass Ionomer Dental Cements	Green	Green	Methane	Red	Blue
Glucose	Blue	Blue	Methyl Alcohol (Methanol)	Yellow	Green
Glutaraldehyde (50%)	Grey	Grey	2-Methoxyethanol (Ethylene Glycol Monomethyl)	Red	Yellow
Glycerin	Blue	Blue	Methyl Amine	Yellow	Green
Glycerol	Blue	Blue	Methyl Bromide	Yellow	Yellow
Grease, Automotive (Petroleum-Based)	Red	Blue	Methyl Butyl Ketone	Red	Red
Grease, Automotive (Silicon-Based)	Green	Green	Methylene Chloride	Red	Red
Grease, Automotive (Synthetic)	Red	Green	Methyl Chloride	Red	Red
Heptane (n-Heptane)	Red	Blue	Methyl Ethyl Ketone (MEK)	Red	Red
Hexane	Red	Green	Methyl Isobutyl Ketone (MIBK)	Red	Red
Hydraulic Fluid (Petroleum-Based)	Red	Green	Methyl Methacrylate	Red	Red
Hydrochloric Acid (20%)	Blue	Green	Mineral Spirits	Red	Blue
Hydrochloric Acid (50%)	Blue	Yellow	Monoethanolamine	Green	Green
Hydrochloric Acid (Concentrated)	Green	Red	Morpholine	Red	Red
Hydrofluoric Acid (48%)	Yellow	Green	Motor Oil (includes Oils made from Petroleum Distillates, Synthetic Oils, Diesel Oils, 2-Stroke Oils, and Hydraulic Oils)	Red	Blue
Hydrofluoric Acid (Concentrated)	Red	Red	Naphtha	Red	Blue
Hydrogen Peroxide (3%)	Green	Green	Naphthalene	Red	Red

EXCELLENT	GOOD	FAIR	NOT RECOMMENDED	NO DATA
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Nitric acid (50%)	Red	Red	Propyl Alcohol	Green	Blue
Nitromethane (95.5%)	Yellow	Red	Propylene (1-propene, Methyl Ethylene)	Red	Red
Nitropropane (95.5%)	Red	Red	Propylene Glycol	Blue	Blue
Nitrophenols	Grey	Grey	Pyridine	Red	Red
Octyl Alcohol (Octanol)	Green	Green	Rust Inhibitors, Automotive	Blue	Blue
Oleic Acid	Yellow	Green	Rust Remover, Automotive (containing <50% Phosphoric acid)	Green	Green
Oxalic Acid	Green	Green	Silver Nitrate (0.17%)	Blue	Green
Paint (Latex-Based)	Red	Yellow	Sodium Acetate (Aqueous)	Blue	Green
Paint (Oil-Based)	Red	Green	Sodium Azide (Sodium Salt)	Blue	Blue
Paint, Automotive (paint containing V.M.&P. Naphtha, Mineral Spirits; with small amounts of Toluene, Xylene or n-Butyl Acetate)	Red	Green	Sodium Bicarbonate (Aqueous)(Baking Soda)	Blue	Blue
Paint, Automotive (paints containing large amounts of Toluene, Xylene or n-Butyl Acetate)	Red	Red	Sodium Chloride (Aqueous)	Blue	Blue
Paint Activator, Automotive (containing MEK, Polyisocyanate Resin, and/or Butyl Acetate)	Red	Yellow	Sodium Cyanide (Aqueous)	Blue	Blue
Paint Reducers/Thinners, Automotive (Aliphatic Hydrocarbons, eg. V.M.&P. Naphtha or Mineral Spirits)	Red	Blue	Sodium Hydroxide (50%)	Blue	Blue
Paint Reducers/Thinners, Automotive (Aromatic Hydrocarbons, eg. Toluene or Xylene)	Red	Red	Sodium Hypochlorite (Bleach)	Yellow	Yellow
Paint Thinner (Duca)	Red	Red	Sodium Selenate (10%)	Grey	Grey
Palmitic Acid	Green	Green	Sodium Thiosulfate (Developing Fluids)	Green	Green
Paraformaldehyde	Red	Green	Staining Rating (All Stains)	Blue	Yellow
Parts wash, automotive (containing Naphtha, n-Hexane, Cyclohexane and/or MEK)+A64	Red	Green	Styrene	Red	Red
Pentane	Red	Blue	Sulfuric Acid (50% Concentration)	Red	Red
Pentyl Ether (same as Pentane)	Red	Blue	Sulfuric Acid (93-98%)	Red	Red
Perchloric Acid (50%)	Yellow	Red	Tannic Acid (5%)	Blue	Blue
Perchloroethylene	Red	Green	Tetrachloroethylene	Red	Yellow
Periodic Acid (50%)	Grey	Grey	Tetrahydrofuran	Red	Red
Petroleum Distillates (Naphthas)	Red	Green	Tetramethylurea	Grey	Grey
Phenol (0.1%)	Blue	Blue	Toluene	Red	Red
Phenol (approx. 100%)	Red	Red	Toluene Diisocyanate	Yellow	Red
Phenolphthalein (Aromatic Phenols)	Red	Red	Transmission Fluid, Type A	Red	Blue
Phosphoric Acid (0 to 50%)	Green	Green	Transmission Fluid, Synthetic	Red	Green
Phosphoric Acid (50-85%)	Green	Red	Trichloroethylene	Red	Red
Phosphoric Acid (100%)	Red	Red	Triethanolamine	Green	Green
Polysorbates	Grey	Grey	Triton X-100, Igepal CA, Polytergent G (Octoxynol with varying Ethylene Oxide units)	Blue	Blue
Potassium Bromate	Blue	Blue	Tung Oil	Red	Blue
Potassium Chloride	Blue	Blue	Turpentine	Red	Blue
Potassium Cyanide	Blue	Blue	Undercoater, Rubberized (Automotive)	Red	Green
Potassium Dichromate (Aqueous)	Green	Green	Urea	Red	Green
Potassium Hydroxide	Green	Green	Varnish	Red	Blue
Potassium Iodide	Green	Blue	Vinyl Chloride	Red	Red
Potassium Permanganate	Blue	Blue	Water	Blue	Blue
Potassium Sulfate (Potassium Sulphate)	Green	Blue	Wax remover, automotive (containing V.M.&P. Naphtha, Xylene and/or Ethylbenzene)	Red	Red
Propyl Acetate	Red	Red	Xylene (Xylol)	Red	Red

EXCELLENT	GOOD	FAIR	NOT RECOMMENDED	NO DATA
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