

PORTAGE WASTEWATER TREATMENT PLANT
Respiratory Hazard Assessment and Respirator Selection For “BASES”

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
Alkaline Iodide Azide Reagent	Water Sodium Hydroxide Potassium Iodide Sodium Azide	34 % 50 % 15 % 1 %	2 mg/cu.m C. 0.3mg/cu m C.	None	Corrosive, Irritant Inhalation	Large Room Venting	Seldom <5 Min.	None
Almagard 3752	Oil Mist Antimony dialkydithiocaramate Antimony Compounds Zink diamylidithiocarbamate Zink Compounds	>75% 3-7% 3-7% <1% <1%	5 mg/m3	<5 mmHg @ 60 F.	Irritant Low Health Risk	Venting	Monthly Maintenance < 2 Hrs	None
Almaplex 1275	Oil Mist Antimony dialkydithiocaramate Antimony Compounds	>80% 3-7% 3-7%	5 mg/m3	<5 mmHg @ 60 F	Irritant Low Health Risk	Venting	Monthly Maintenance < 2 Hrs	None
Almasol 605/608	Oil Mist Kerosine	>90% <1 %	5 mg/m3	<5 mmHg @ 60 F	Irritant Low Health Risk	Venting	Monthly Maintenance < 2 Hrs	None
Ammonium Hydroxide 1:1	Water Ammonium Hydroxide	85 % 15%	50 ppm C.	None	Irritant Burns Corrosive	Large Room Venting	<15 min Monthly	None
Ammonium Hydroxide 3%	Water Ammonium Hydroxide	97 % 3%	50 ppm C.	None	Irritant Burns Corrosive	Large Room Venting	<15 min Monthly	None
Ammonium Hydroxide 25%	Water Ammonium Hydroxide	92.5 % 7.5%	50 ppm C.	None	Irritant Burns Corrosive	Large Room Venting	<15 min Monthly	None
Anti-overflow cartridge Base	Quaternary ammonium compound	<5%	None	None	Irritant	None	Seldom 1X Year<5 Min	None

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Blaster 1074	CitrusTerpene Diethylene Glycol Ethyl Ether Nonylphenol Ethoxylate Diethanolamine Liquified PetroleumGas	20/30 1/10% 1/10% 1/10% 10/30	1200mg/m3 1000ppm	(psig@70F.) 60	Irritant Low Health Risk	Large Room Venting	Seldom <15 Min.	None
Buffer Solution 7.0	Potassium Phosphate Monobasic Sodium Hydroxide	0.7by weight 0.2by weight	None	Same as water	Irritant Low Health Risk	Venting	7Xweek <5mon.	None
Buffer Solution 10.0	Water Potassium Hydroxide Boric Acid Bromophenol Blue, Sodium Salt Bromocresol green, sodium Salt	>98% <1% <1% <0.01% <0.01%	2mg/cu.m	Same as water	Irritant Low Health Risk	Venting	7Xweek <5min.	None
Burn-Out	Potassium Hydroxide Diethylene Glycol Monomethyl Ether Tetrapotassium Pyrophosphate Water Sodium Gluconate	7-13% 3-7% 1-5% N/D N/D	None	None.	Irritant Burns Corrosive	Venting Large Room	Seldom <5 Min.	None

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Clear-Clean	Tetrasodium EDTA Propylene Glycol n-Propyl Ether	38% 1-5%	None	None	Irritant Low Health Risk	Venting	Seldom <30 min	None
Colilert	Not classified as hazardous directive 67/548/EEC	None	None	None	Low Health Risk	None	May-Sept. 2X Week <20min	None
Cyclo-Plus	Potassium Hydroxide Sodium Molybdate	<10% >1.0%	10PPM 10PPm	None	Corrosive Irritant Burns	Venting	2X Year <30min	None
Dunes Tan (Paint)	Titanium Dioxide Ester Alcohol Propylene Glycol Diamethylene Glycol Methyl Ether	10.0% 5.0% 5.0% 5.0%	15mg/m3 None None None	None	Irritant Inhalation Low Health Risk	Venting	Seldom 2x Year for 5Hours	None
E-Clean	None	None	None	None	Irritant Low Health Risk	None	Seldom <2Hours	None
Equi-Transferrant	Potassium Nitrate Demineralize Water Sodium Chloride	10-20% 80-90% 0.5-3.0%	None None None	None	Irritant Low Health Risk	None	Seldom <1Hours	None
Erupt	Deionized Water Liquified Petroleum Gas Mineral Spirits Inerts Permethrin	55-60% 30% 5-10% 4.22% 0.55%	None 1000ppm 100ppm None None	100+/- 10@130F.	Irritant Inhalation Toxic	Venting Wash Thoroughly	Seldom <15min	None

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Ethy Alcohol	Ethanol Ethy Acetate 4-Methy-2-Pentanone Methanol	92% 1% 1% 5%	1900mg/m3 400ppm None None	97mmHg @20C.	Toxic Inhalation Irritant	Venting Large Room Wash Thoroughly	Seldom <15min	None
E-Z Does It	Aliphatic Petroleum Distillate Liquefied Petroleum Gas	75-85% None	100ppm 1000ppm	None	Inhalation Irritant	Venting Wash Thoroughly	Seldom <10Min	None
In-Sight (Foaming Glass Cleaner)	Propane Butane 2-Butoxyethanol	<5% <5% <5%	1000ppm 800ppm 25ppm	None	Inhalation Irritant Low Health Risk	Irritant Low Health Risk	Monthly 2-3 Hrs	None
Iodide Reagent	Water Potassium Iodide	90% 10%	None	None	Inhalation Irritant Low Health Risk	Venting Large Room	May-Sept. 2X Week <20min	None
Turbine Oil 6414	Oil Mist	>95%	5mg/m3	<5mmHg @60F	Irritant Low Health Risk	Venting Large Room	Monthly Maintenance < 2 Hrs	None
6520 Monolec Hydraulic Oil	Oil Mist Zinc Dithiophosphate Zinc Compounds Butylated Phenol 1-Hexanol,2-ethyl(2Ethylhexanol)	>90% <1.0% <1.0% <0.5% <0.25%	5mg/m3 None None None 2460mg/kg Rat	<5mmHg @60F.	Irritant Low Health Risk	Venting Large Room	Monthly 2-3 Hrs	None
4702 Monolec Lubricant	Oil Mist Antimony Dialkylthiocarbamate Antimony Compounds	>80% 4-7% 3-7%	5mg/m3 0.5mg/m3 as Sb 0.5mg/m3 as Sb	<5mmHg @60F.	Irritant Low Health Risk	Venting Large Room	Monthly 2-3 Hrs	None

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6405 Monolec Compressor Oil	Oil Mist Diphenyl Amine 3,5-Bis(1,1-Dimethylethyl)-4-Hydroxy-Benzenepropanoic Acid,C7-C9 Branch Alky Esters	>90% <0.01% 0.5%	5mg/m3 10mg/m3 None	<5mmHg @60F.	Irritant Low Health Risk	Venting Large Room	Monthly 2-3 Hrs	None
Nitrification Inhibitor	Sodium Sulfate 2-Chloro-6-(Trichloromethyl)pyridine	>95% <5%	None None	None	Irritant	Venting Large Room	Daily <5Min	None
North Woods Bare Bones	2-Butoxyethanol Monoethanolamine Potassium Hydroxide	20% 0-5% 5-10%	50ppm 6ppm None	20mmHg @68F	Irritant Inhalation	Venting Large Room	Seldom 1xYear 3-4Hours	None
North Woods Brilliance (Glass Cleaner)	Ammonia Hydroxide 2-Butoxyethanol	0-5% 1.0%	50ppm 50ppm	None	Irritant	Venting	Monthly 2-3Hours	None
North Woods Fiber Fresh	Viable Bacterial Culture Liquified Petroleum Gas	5-10% 6-10%	None 1000ppm	55psig@ 72F	Irritant Inhalation	Venting Large Room	Weekly <30Min	None

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North Woods Mega Wipes (Disinfectant wipe)	n-Alky dimethyl benzyl ammonium chloride	0.105%	None	None	Corrosive Irritant	Venting	Weekly 1-2Hours	None
	n-Alky dimethyl ethylbenzyl Ammonium Chloride	0.105%	None					
	Diethylene glycol monobutyl ether	5-10%	None					
	Tetrasodium EDTA	1-5%	None					
North Woods Mirage (Floor Finisher)	Glycol Ether	0-5%	None	20mmHg @68F	Irritant	Venting	Seldom 1-2 Hours	None
North Woods Molecule Plus	Isopropyl Alcohol	<20%	400ppm	None	Irritant Inhalation	Venting	1xWeek <15Min	None
North Woods Sheer Force (Foam Degreaser)	Liquified Petroleum Gas	10-30%	1000ppm	60	Irritant Inhalation	Venting	Monthly 2 Hours	None
North Woods Supreme Skin Care	None	None	None	None	Irritant	None	Daily <15Min	None

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North Woods Table Top (Disinfectant)	Alky dimethyl benzyl ammonium chloride	<1%	None	None	Irritant	Venting	Daily <20Min	None
	Alky dimethyl ethylbenzyl Ammonium Chloride	<1%	None					
Orange Foam Away	d-Limonene	1-5%	None	None	Irritant Inhalation	Venting	Monthly 1-2 Hours	None
	2-Butoxyethanol	1-5%	25ppm					
	Sodium Metasilicate	1-5%	None					
	Butane(Propellant)	1-10%	800ppm					
	Propane(Propellant)	1-10%	1000ppm					
Isobutane(Propellant)	1-10%	None						
Phenolphthal ein 1% in 95% Alcohol	Isopropyl Alcohol	95%	980mg/cu.m	33@20C	Burns Irritant Inhalation	Venting	Weekly 2X <5Min	None
	Phenolphthale in Powder	1%	None					
Phosphate Buffer Solution PH=7.2	Potassium Phosphate dibasic	2.2%	None	None	Inhalation	Venting Large Room	Seldom <5Min	None
	Potassium Phosphate Monobasic	3.3%	None					
	Sodium Phosphate	0.9%	None					
	Ammonium Chloride	0.2%	10mg/cu.m					

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Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
Poly-Solve Polymer Solvent	2-Butoxyethanol	1-5%	25ppm	None	Irritant Inhalation	Venting Large Room	Seldom 1-3 Hours	None
	Sodium hydroxide	1-5%	2mg/m3 C					
	Surfactant	1-3%	None					
	Water	100%	None					
Prolab glass Cleaner Dishwasher Soap	Sodium Metasilicate Pentahydrate	10-15%	None	None	Irritant Inhalation	Venting Large Room	Daily <5Min	None
Pursuit-94	1,2-Propanediol Bacterial Spore concentrate	10-15% 5-15%	None None	None	Irritant	Venting Large Room	Seldom 1-3 Hours	None
Ri-Tec Omn all purpose cleaner	Caustic Soda	0.001-1%	None	None	Irritant Inhalation Ingestion	Venting Large Room	Seldom 1Hours	None
	Tetrapotassium Pyrophosphate	0.001-1%	None					
	Glycol ether	1-5%	4-5ml/kg					
	n-methyl pyrrolidone	1-5%	None					
	EDTA trace	None	None					
Proprietary surfactants	None	None						
Sani-Hand Wipes	Ethanol	60-70%	1000ppm	None	Irritant	Venting Outdoors	Daily <5Min	None
Sewer Compound XXX	Sodium Hydroxide	60-65%	2mg/m3 C	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	Seldom <10Min	None
	Sodium Nitrate	22-28%	None					
Sodium Bisulfate 38%	Sodium Bisulfate	91.5%	None	None	Irritant Burn Inhalation	Venting Large Room	Seasonal April-Sept. Daily <10Min	None
	Sodium Sulfate	4-5%	None					
	Moisture	0.1-1%	None					
Sodium Hydroxide	Sodium Hydroxide Water	50% 50%	2mg/m3	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	2X Week <10Min	None

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Sodium Hydroxide 10 N	Sodium Hydroxide Water	40% 60%	2mg/m3	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	2X Week <10Min	None
Sodium Hypochlorite	Sodium Hypochlorite Sodium Hydroxide	10-15.6% 0.8%	2mg/m3 2mg/m3	None	Irritant Inhalation Ingestion	Venting Large Room	Seasonal April- Sept. Daily <5min	None
Sodium Sulfate	Sodium Sulfate	100%	None	None	Irritant Inhalation	Venting Large Room	Seldom <5min	None
Sodium thiosulfate 0.025N	Sodium thiosulfate Water	0.62% 99.38%	None	None	Irritant Inhalation Ingestion	Venting Large Room Low Health Risk	Seldom 1xYear <10Min	None
Sodium thiosulfate 1.0N	Sodium thiosulfate Water	2.48% 97.52%	None	None	Irritant Inhalation Ingestion	Venting Large Room Low Health Risk	Seldom 1xYear <10Min	None
Sovereign Cleaner	Water Sodium Xylene Sulfonate Tetrapotassium Pyrophosphate Sodium Metasilicate Sodium Dodecylbenzene Sulfonate Tetrasodium EDTA Orange Oil	>50% 5-10% 3-6% 1-5% 1-5% <1	None None None None None None	None	Irritant Inhalation Ingestion	Venting Large Room Wash Hands before eating	Seldom 7xYear 1 Hour	None

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Speed Wipes	Sodium Xylene Sulfonate d-Limonene Ethoxylated Alkyl amine Liner Alcohol ethoxylate Diazolidinyl urea	<2% <2% <2% <2% <2%	None None None None	None	Irritant Ingestion	None Low Health Risk	Weekly <15Min	None
SSC Stainless steel cleaner	Propane Butain Paraffinic Mineral Oil	<10% <10% <25%	1000ppm 800ppm 5mg/m3	None	Irritant Inhalation Ingestion Flammable	Venting Large Room	Seldom 6xYear 1-2 Hours	None
Terra Glaze	Dibutyl phthalate Diethylene glycol monoethyl ether	1.6% 6.5%	5mg/m3	None	Irritant Absorbed	Venting Large Room	Seldom 1-2 Hours	None
Tough Duty	2-Butoxyethanol Isopropanol	9% 1-5%	120mg/m3 980mg/m3	None	Irritant Inhalation	Venting Large Room	Seldom 1-2 Hours	None
Tough Touch Hand cleaner with pumice	Hydrotreated distillate light	10-20%	None	None	Irritant Low health risk	None	Seldom <5min	None
Trident Cyclo-Max	Sodium Nitrite Sodium Hydroxide	6% 1-5%	None 2mg/m3	None	Irritant Inhalation Ingestion Burns	Venting Large Room	Seldom 2Xyear 1Hours	None
Triple-O	Ethylene Glycol Momobutyl Ether Orange terpenes Trisodium Phosphate Tetrapotassium Pyrophosphate	<3% <5% <5% <5%	50ppm None None None	None	Irritant Inhalation Ingestion Combustible Absorbed	Venting Large Room	Seldom Monthly 1Hours	None

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Antimicrobail	Enzyme	None	None	None	Irritant Ingestion	Venting Large Room	Seldom Monthly 1Hours	None
United 172 Crevice creeper	Ethanol Isobutane Propane	10-30% 3-7% 3-7%	1000ppm 1000ppm 1000ppm	65- 75psig	Irritant Inhalation Flammable	Large Room Good Venting outdoors	Seldom ,Summer when needed. <5min	None
United 135 Flower Power	Ethanol alcohol Isobutane Propane	60- 100% 10-30% 1-5%	1000ppm 1000ppm 1000ppm	70psig@ 70F	Irritant Inhalation Flammable	Large Room Good Venting	Seldom when needed. <15min	None
United 184 Grease Goblin	d-1,8(9)-p- menthadien e n-Butane Synthetic Isoparaffini c Hydrocarbo n Odorless mineral spirits Propane Polyethylen e Glycol Nonylpheno l Ether	10-15% 10-15% 8-10% 5-8% 3-5% 3-5%	None 800ppm None None 1000ppm None	35- 45psig@ 70F	Irritant Inhalation Flammable	Large Room Good Venting	Seldom when needed. <15min	None
United 756 lift-zyme	Enzyme	None	None	17.5mm Hg@77 F	Irritant	Large Room Good Venting Outdoors	Seldom when needed. 1-3Hours	None
United 756 Protex All	None	None	None	None	Irritant	Large Room	Seldom when needed. 1Hours	None

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United 756 Samson	2-Butoxy ethanol Propane/n-Butane	10-30% 5-10%	240mg/m3 1000ppm	17.5mm Hg	Irritant Inhalation Burns	Large Room Good Venting	Seldom when needed. 1Hours	None
United 222 Super Orange Jel	d-1,8(9)-p-menthadien e	1-5%	None	None	Irritant Inhalation Burns	Large Room Good Venting	Seldom when needed. 1-3 Hours	None
United 986 Sweet Nothings	None	None	None	None	Irritant	Large Room	Seldom when needed. <15Min	None
United 514 Titan (Liquid Laundry Det.)	Isopropyl alcohol	5-7%	400ppm	None	Inhalation Irritant	Large Room	Seldom <10Min	None
United 655 Zyme-Flow	Enzyme	None	None	None	Irritant	Large Room Good Venting Outdoors	Seldom when needed. 1-3Hours	None
United 556 Zyme-Treat	Enzyme	None	None	None	Irritant	Large Room Good Venting Outdoors	Seldom when needed. 1-3Hours	None
United 894 Zyme-Out	Enzyme	None	None	None	Irritant	Large Room Good Venting Outdoors	Seldom when needed. 1-3Hours	None
960Waterless Hand Cleaner Towels	Oil Mist	<10%	5mg/m3	>1mmHg@F	Irritant	None Low Health Risk	Seldom when needed. <5Min	None

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Zep Concentrated Glass Cleaner	Ethanol Tetrasoium Ethylenedia mine Tetraacetate	20-30% <10%	1000ppm	None	Irritant Inhalation Flammable	Large Room Good Venting	Seldom when needed. 1Hours	None

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