Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Conditio n 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 dialkydithiocara mate Antimony Compounds Zink diamyldithiocarb amate Zink Compounds	>75% 3-7% 3-7% <1% <1%	5 mg/m3	<5 mmHg @ 60 F.	Irritant Low Health Risk	Venting	Monthly Maintai nce < 2 Hrs	None
Almaplex 1275	Oil Mist Antimony dialkydithiocara mate Antimony Compounds	>80% 3-7% 3-7%	5 mg/m3	<5 mmHg @ 60 F	Irritant Low Health Risk	Venting	Monthly Maintai nce < 2 Hrs	None
Almasol 605/608	Oil Mist Kerosine	>90% <1 %	5 mg/m3	<5 mmHg @ 60 F	Irritant Low Health Risk	Venting	Monthly Maintai nce < 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

Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical	Contents	%	Exposure	Vapor	Hazard	Conditio	Duration	Respirator
Name			Limit	Pressure		n		Required or
- 1111111						Of Use		Voluntary
Blaster 1074	CitrusTerpene	20/30		(psig@7	Irritant	Large	Seldom	None
	Diethylene	1/10%		0F.)	Low Health	Room	<15	2
	Glycol Ethyl		1200mg/m3	60	Risk	Venting	Min.	
	Ether		S					
	Nonylphenol	1/10%						
	Ethoxylate							
	Diethanolami	1/10%						
	ne		1000ppm					
	Liquified	10/30	11					
	PetroleumGas							
Buffer	Potassium	0.7by	None	Same as	Irritant	Venting	7Xweek	None
Solution 7.0	Phosphate	weight		water	Low Health		<5mon.	
	Monobasic	0.2by			Risk			
	Sodium	weight						
	Hydroxide							
Buffer	Water	>98%		Same as	Irritant	Venting	7Xweek	None
Solution	Potassium	<1%	2mg/cu.m	water	Low Health		<5min.	
10.0	Hydroxide				Risk			
	Boric Acid	<1%						
	Bromophenol	< 0.01						
	Blue, Sodium	%						
	Salt							
	Bromocresol	< 0.01						
	green, sodium	%						
	Salt							
Burn-Out	Potassium	7-13%	None	None.	Irritant	Venting	Seldom	None
	Hydroxide				Burns	Large	<5 Min.	
	Diethylene	3-7%			Corrosive	Room		
	Glycol							
	Monomethyl							
	Ether							
	Tetrapotassiu	1-5%						
	m							
	Pyrophosphat	N/D						
	e Water	N/D						
	Sodium							
	Gluconate							

Respiratory Hazard Assessment and Respirator Selection For "BASES"

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Chemical	Contents	%	Exposure	Vapor	Hazard	Conditio	Duration	Respirator
Name			Limit	Pressure		n		Required or
		200				Of Use		Voluntary
Clear-Clean	Tetrasodium	38%	None	None	Irritant	Venting	Seldom	None
	EDTA				Low		<30 min	
	Propylene	1-5%			Health			
	Glycol n-				Risk			
~ 111	Propyl Ether				_		7.5	
Colilert	Not classified	None	None	None	Low	None	May-	None
	as hazardous				Health		Sept.	
	directive				Risk		2X	
	67/548/EEC						Week	
							<20min	
Cyclo-Plus	Potassium	<10%	10PPM	None	Corrosive	Venting	2X Year	None
	Hydroxide	4.00	4.055		Irritant		<30min	
	Sodium	>1.0%	10PPm		Burns			
	Molybdate							
Dunes Tan	Titanium	10.0%	15mg/m3	None	Irritant	Venting	Seldom	None
(Paint)	Dioxide				Inhalation		2xYear	
	Ester Alcohol	5.0%	None		Low		for	
	Propylene	5.0%	None		Health		5Hours	
	Glycol				Risk			
	Diamethlene	5.0%	None					
	Glycol							
	Methyl Ether							
E-Clean	None	None	None	None	Irritant	None	Seldom	None
					Low		<2Hours	
					Health			
					Risk			
Equi-	Potassium	10-	None	None	Irritant	None	Seldom	None
Transferrant	Nitrate	20%	None	TVOILE	Low	None	<1Hours	TOHE
Transferrant	Demineralize	80-	None		Health		<1110uis	
	Water	90%	None		Risk			
	Sodium	0.5-	None		Kisk			
	Chloride	3.0%	None					
Erupt	Deionized	55-	None	100+/-	Irritant	Venting	Seldom	None
ширі	Water	60%	1,0116	10@130F.	Inhalation	Wash	<15min	110110
	Liquified	30%	1000ppm	10 € 1501.	Toxic	Through	1311111	
	Petroleum		Tooppin		1 one	ly		
	Gas							
	Mineral	5-10%	100ppm					
	Spirits							
	Inerts	4.22%	None					
	Permethrin	0.55%	None					
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Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
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 Throughly	Seldom <15min	None
E-Z Does It	Aliphatic Petroleum Distillate Liquefied Petrolem Gas	75- 85% None	100ppm 1000ppm	None	Inhalation Irritant	Venting Wash Throughly	Seldom <10Min	None
In-Sight (FoamingGl ass 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 Maintai nce < 2 Hrs	None
6520 Monolec Hydraulic Oil	Oil Mist Zinc Dithiophosph ate Zinc Compounds Butylated Phenol 1-Hexanol,2- ethyl(2Ethylh exanol)	>90% <1.0% <1.0% <0.5% <0.25 %	5mg/m3 None None None 2460mg/k g Rat	<5mmHg @60F.	Irritant Low Health Risk	Venting Large Room	Monthly 2-3 Hrs	None
4702 Monolec Lubricant	Oil Mist Antimony Dialkyldithiocar bamate 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

Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical	Contonto	%	E	Varan	Howard	Condition	Dunation	Dagrington
	Contents	%	Exposure	Vapor	Hazard	Of Use	Duration	Respirator
Name			Limit	Pressure		Of Use		Required or
6407	Oil Mist	000	5 / 2	<i>7</i> TT	T	***	3.6 .1.1	Voluntary
6405	Diphenyl Amine	>90%	5mg/m3	<5mmHg	Irritant	Venting	Monthly	None
Monolec	3,5-Bis(1,1-	<0.01	10mg/m3	@60F.	Low	Large	2-3 Hrs	
Compressor	Dimethylethyl)-	%			Health	Room		
Oil	4-Hydroxy-				Risk			
	Benzenepropanoi							
	c Acid,C7-C9 Branch							
	Alky Esters							
	•	0.5%	None					
Nitrification	Sodium	>95%	None	None	Irritant	Venting	Daily	None
Inhibitor	Sulfate					Large	<5Min	
	2-Chloro-6-	<5%	None			Room		
	(Trichloromet							
	thyl)pyridine							
North	2-	20%	50ppm	20mmHg	Irritant	Venting	Seldom	None
Woods	Butoxyethano			@68F	Inhalation	Large	1xYear	
Bare Bones	1					Room	3-	
	Monoethanola	0-5%	6ppm				4Hours	
	mine							
	Potassium	5-10%	None					
	Hydroxide							
North	Ammonia	0-5%	50ppm	None	Irritant	Venting	Monthly	None
Woods	Hydroxide	1.0%	50ppm				2-	
Brilliance	2-		11				3Hours	
(Glass	Butoxyethano							
Cleaner)	l							
ĺ								
North	Viable	5-10%	None	55psig@	Irritant	Venting	Weekly	None
Woods	Bacterial			72F	Inhalation	Large	<30Min	
Fiber Fresh	Culture					Room		
	Liquified	6-10%	1000ppm					
	Petroleum		1.1					
	Gas							
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Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
North Woods Mega Wipes (Disinfectan t wipe)	n-Alky dimethyl benzyl ammonium chloride n-Alky dimethyl ethylbenzyl Ammonium	0.105% 0.105%	None None	None	Corrosive Irritant	Venting	Weekly 1- 2Hours	None
	Chloride 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

Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
North Woods Table Top (Disinfectan	Alky dimethyl benzyl ammonium chloride	<1%	None	None	Irritant	Venting	Daily <20Min	None
t)	Alky dimethyl ethylbenzyl Ammonium Chloride	<1%	None					
Orange Foam Away	d-Limonene 2- Butooxyethan ol	1-5% 1-5%	None 25ppm	None	Irritant Inhalation	Venting	Monthly 1-2 Hours	None
	Sodium Metasilicate Butane(Propel	1-5% 1-10%	None 800ppm					
	lant) Propane(Propellant)	1-10%	1000ppm					
	Isobutane(Pro pellant)	1-10%	None					
Phenolphtal ein 1% in	Isopropyl Alcohol	95%	980mg/cu.m	33@20C	Burns Irritant	Venting	Weekly 2X	None
95% Alcohol	Phenolphthale in Powder	1%	None		Inhalation		<5Min	
Phosphate Buffer Solution	Potassium Phosphate dibasic	2.2%	None	None	Inhalation	Venting Large Room	Seldom <5Min	None
PH=7.2	Potassium Phosphate Monobasic	3.3%	None			Room		
	Sodium Phosphate	0.9%	None					
	Ammonium Chloride	0.2%	10mg/cu.m					

Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposur e Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
Poly- Solve Polymer Solvent	2- Butoxyethanol Sodium hydroxide Surfactant Water	1-5% 1-5% 1-3% 100%	25ppm 2mg/m3 C None None	None	Irritant Inhalation	Venting Large Room	Seldom 1-3 Hours	None
Prolab glass Cleaner Dishwash er 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 Tetrapotassium Pyrophosphate Glycol ether n-methyl pyrrollidone EDTA trace Proprietary surfactants	0.001-1% 0.001-1% 1-5% 1-5% None None	None None 4-5ml/kg None None	None	Irritant Inhalation Ingestion	Venting Large Room	Seldom 1Hours	None
Sani-Hand Wipes	Ethanol	60-70%	1000pp m	None	Irritant	Venting Outdoors	Daily <5Min	None
Sewer Compoun d XXX	Sodium Hydroxide Sodium Nitrate	60-65% 22-28%	2mg/m3 C None	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	Seldom <10Min	None
Sodium Bisulfate 38%	Sodium Bisulfate Sodium Sulfate Moisture	91.5% 4-5% 0.1-1%	None None None	None	Irritant Burn Inhalation	Venting Large Room	Seasonal April- Sept. Daily <10Min	None
Sodium Hydroxide	Sodium Hydroxide Water	50% 50%	2mg/m3	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	2X Week <10Min	None

Respiratory Hazard Assessment and Respirator Selection For "BASES"

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Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
Sodium Hydroxide10 N	Sodium Hydroxide Water	40% 60%	2mg/m3	None	Irritant Inhalation Ingestion Crossive	Venting Large Room	2X Week <10Min	None
Sodium Hypochlorite	Sodium Hypochlorit e 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 Tetrapotassi um Pyrophosph ate Sodium	>50% 5-10% 3-6%	None None None	None	Irritant Inhalation Ingestion	Venting Large Room Wash Hands before eating	Seldom 7xYear 1 Hour	None
	Metasilicate Sodium Dodecylben zene Sulfonate	1-5%	None					
	Tetrasodium EDTA Orange Oil	1-5% <1	None None					

Respiratory Hazard Assessment and Respirator Selection For "BASES"

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Chemical	Contents	%	Exposure	Vapor	Hazard	Conditi	Duration	Respirator
Name			Limit	Press		on		Required or
C 1377	C 1:	201	NT	ure	T '	Of Use	337 11	Voluntary
Speed Wipes	Sodium	<2%	None	None	Irritant	None	Weekly	None
	Xylene				Ingestion	Low	<15Min	
	Sulfonate	201	NT			Health		
	d-Limonene	<2%	None			Risk		
	Ethoxylated	<2%	None					
	Alkyl amine Liner Alcohol	-20/	Nama					
		<2%	None					
	ethoxylate	-201	None					
	Diazolidinyl	<2%	None					
SSC	urea	<10%	10000000	None	Irritant	Vantina	Seldom	None
	Propane		1000ppm	None	Irritant Inhalation	Venting		None
Stainless steel	Butain	<10%	800ppm			Large	6xYear 1-2	
cleaner	Paraffinic Mineral Oil	<25%	5mg/m3		Ingestion Flammable	Room	Hours	
Terra Glaze		1.6%	5ma/m²	None	Irritant	Venting	Seldom	None
Terra Graze	Dibutyl phthalate	1.0%	5mg/m3	None	Absorbed	_	1-2	None
	Diethylene	6.5%			Ausorbeu	Large Room	Hours	
	glycol	0.570				Kooiii	110018	
	monoethyl							
	ether							
Tough Duty	2-	9%	120mg/m3	None	Irritant	Venting	Seldom	None
Tough Duty	Butoxyethano	770	120111g/1113	TVOILC	Inhalation	Large	1-2	TVOILE
	1				Illiaiation	Room	Hours	
	Isopropanol	1-5%	980mg/m3			Room	110415	
Tough Touch	Hydrotreated	10-20%	None	None	Irritant	None	Seldom	None
Hand cleaner	distillate light				Low health		<5min	
with pumice					risk			
1								
Trident Cyclo-	Sodium	6%	None	None	Irritant	Venting	Seldom	None
Max	Nitrite				Inhalation	Large	2Xyear	
	Sodium	1-5%	2mg/m3		Ingestion	Room	1Hours	
	Hydroxide				Burns			
Triple-O	Ethylene	<3%	50ppm	None	Irritant	Venting	Seldom	None
_	Glycol				Inhalation	Large	Monthly	
	Momobutyl				Ingestion	Room	1Hours	
	Ether				Combustible			
	Orange	<5%	None		Absorbed			
	terpenes							
	Trisodium	<5%	None					
	Phosphate							
	Tetrapotassiu	<5%	None					
	m							
	Pyrophosphat							
	e							

Respiratory Hazard Assessment and Respirator Selection For "BASES"

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Chemical	Contents	%	Exposure	Vapor	Hazard	Condition	Duration	Respirator
Name			Limit	Pressure		Of Use		Required
								or Voluntary
Antimicrobail	Enzyme	None	None	None	Irritant	Venting	Seldom	None
7 Kittimieroodii	Elizyme	-,,,,,,	Trone	Tione	Ingestion	Large	Monthly	Trone
					mgestion	Room	1Hours	
						Ttooin	1110015	
United 172	Ethanol	10-30%	1000ppm	65-	Irritant	Large	Seldom	None
Crevice	Isobutane	3-7%	1000ppm	75psig	Inhalation	Room	,Summer	Trone
creeper	Propane	3-7%	1000ppm	707518	Flammable	Good	when	
			r			Venting	needed.	
						outdoors	<5min	
United 135	Ethanol	60-	1000ppm	70psig@	Irritant	Large	Seldom	None
Flower Power	alcohol	100%	1000ppm	70F	Inhalation	Room	when	
	Isobutane	10-30%	1000ppm		Flammable	Good	needed.	
	Propane	1-5%				Venting	<15min	
United 184	d-1,8(9)-p-	10-15%	None	35-	Irritant	Large	Seldom	None
Grease Goblin	menthadien			45psig@	Inhalation	Room	when	
	e			70F	Flammable	Good	needed.	
	n-Butane	10-15%	800ppm			Venting	<15min	
	Synthetic	8-10%	None					
	Isoparaffini							
	C							
	Hydrocarbo							
	n Odorless	5-8%	None					
	mineral	3-0%	None					
	spirits							
	Propane	3-5%	1000ppm					
	Polyethylen	3-5%	None					
	e Glycol	3 3 70	Tione					
	Nonylpheno							
	l Ether							
United 756	Enzyme	None	None	17.5mm	Irritant	Large	Seldom	None
lift-zyme				Hg@77		Room	when	
				F		Good	needed.	
						Venting	1-3Hours	
						Outdoors		
United 750	NI a m -	No.	NT ass -	Nan-	Imitant	I ama -	C = 1 .1	NI ara -
United 756 Protex All	None	None	None	None	Irritant	Large Room	Seldom when	None
FIOREX All						KOOIII	needed.	
							1Hours	
							1110015	
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Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical Name	Contents	%	Exposure Limit	Vapor Pressure	Hazard	Condition Of Use	Duration	Respirator Required or Voluntary
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	>1mmH g@F	Irritant	None Low Health Risk	Seldom when needed. <5Min	None

Respiratory Hazard Assessment and Respirator Selection For "BASES"

Chemical	Contents	%	Exposure	Vapor	Hazard	Condition	Duration	Respirator
Name	Contents	70	Limit	Pressure	Huzura	Of Use	Duration	Required
1 (dille			Limit	Tressure		01 050		or
								Voluntary
Zep	Ethanol	20-30%	1000ppm	None	Irritant	Large	Seldom	None
Concentrated	Tetrasoium	<10%	roooppin	1,0110	Inhalation	Room	when	1 (0110
Glass Cleaner	Ethylenedia	11070			Flammable	Good	needed.	
	mine				1 1001111100010	Venting	1Hours	
	Tetraacetate							