HP Series Enclosures with Hinged Quick-Release Cover

- Meets NEMA 1, 3, 38, 4, 4X, 12, 13
- Meets IP 66



Himeline[®] HP Series enclosures for medium sized devices and equipment provide superior performance as junction and terminal wiring boxes, and instrument and control housing applications.

For indoor/outdoor industrial, MRO, and OEM applications. HP Series enclosures are resistant to corrosion, sunlight, chemicals, dirt, and moisture. Temperature range from -58° F to 320° F.

Features

- Projections for affixing cover mounted panel.
- Door locking mechanism convertible to key lock.
- M8x18 studs for back panel mounting (included).
- Hidden hinges open 185° for easy access.
- Multipositional DIN rail fixing components.
- Removable stainless steel hinge pins.
- Single piece construction.
- Opaque or tempered glass window option.
- Steel, nonmetallic & slotted back panels available.
- External & internal venting available.
- Hinged variable height inner panel option.
- Quick lock 1/4-turn entry.
- Underside grid pattern on inner door panel.
- Self-positioning panel depth adjusters.
- Pole mounting kit.
- Pedestal mounting capability.
- Sunlight resistant.

Applications

- Junction boxes.
- Terminal wiring boxes.
- Instrument and control housing.
- Indoor or outdoor use.

Standards

- NEMA Type 1, 3, 3S, 4, 4X, 12, 13.
- UL Listed per UL 50, enclosures for electrical equipment.
- CSA certified.
- Meets IP 66.

Material

• Lids/Bases – Fiberglass reinforced polyester.

HP Series Enclosures with Hinged Quick-Release Cover

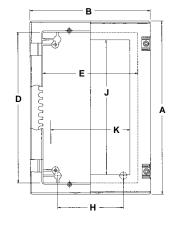


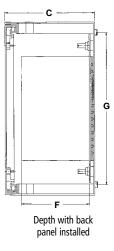
Specifications

Enclosure With Opaque Cover	Std. Ctn. Wt.	Enclosure With Clear	Std. Ctn. Wt.	Window Dimension		External		D Inte)imensior rnal	IS	Mou	inting	Wi	ndow	Std. Ctn.
Part Nos.	(lbs.)	Window*	(lbs.)	(H x W) (in.)	Α	В	C	D	E	F	G	H	J	K	Qty.
HP1612B	11.04	HC1612B	12.5	11 x 7.87	16.93	12.99	7.87	14.96	10.24	6.61	14.76	5.91	11.02	7.87	1
HP2016B	16.80	HC2016B	17.2	14.96 x 11.81	20.87	16.93	7.87	18.90	14.17	6.61	18.70	9.84	14.96	11.81	1
HP2416C	21.13	HC2416C	24.12	18.89 x 11.81	25.47	17.17	9.84	22.83	14.17	8.35	22.64	9.84	18.90	11.81	1
HP3020D	32.28	HC3020D**	36.02	22.83 x 15.74	29.41	21.10	11.81	26.77	18.11	10.28	26.57	13.78	22.83	15.75	1
HP3325D	39.00	HC3325D**	43.12	26.77 x 19.68	33.35	25.04	11.81	30.71	22.05	10.28	30.51	17.72	26.77	19.69	1

* HC Enclosures are IP 65 Rated. Clear window is glass.

** This series of enclosures come standard with body, lid and mounting rail kit.

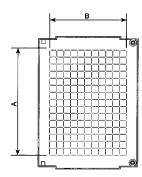


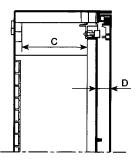


Hinged Internal Door

- Internal fiberglass reinforced polyester door assembly.
- Grid pattern on the inside for quicker positioning of equipment.
- Quick locking 1/4-turn entry.

Part	4	A		В		с		D	Std. Ctn.	Std. Ctn.
Numbers	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	Qty.	Wt. (lbs.)
PID1612	12.40	(315)	18.07	(205)	5.98	(152)	1.02	(26)	1	2.05
PID2016	16.34	(415)	12.00	(305)	5.98	(152)	1.02	(26)	1	3.15
PID2416	20.28	(515)	12.00	(305)	7.64	(194)	1.26	(32)	1	4.50
PID3020	24.21	(615)	15.94	(405)	9.61	(244)	1.26	(32)	1	6.50
PID3325	28.15	(715)	19.88	(505)	9.61	(244)	1.26	(32)	1	8.45

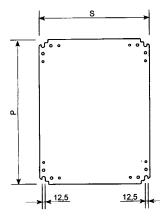




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Back Panels Dimensions

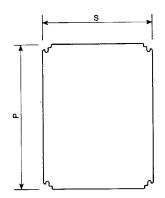
A complete range of plates, which can be directly fixed to the enclosure supports or to the adjustable depth supports.



Steel Back Panels Steel back panels are white painted 14 gauge steel.

To Fit Enclosures	Part Numbers	Thicl	kness (mm)	Weig	ght (kg)	P in.	S in.
HP1612B	PMM1612	.079	(2)	3.10	(1.6)	14.37	9.84
HP2016B	PMM2016	.079	(2)	6.15	(2.5)	18.30	13.78
HP2416C	PMM2416	.079	(2)	8.0	(3.1)	22.24	13.78
HP3020D	PMM3020	.079	(2)	12.04	(4.6)	26.18	17.72
HP3325D	PMM3325	.118	(3)	20.0	(9.9)	30.11	21.65

PVC Insulating Back Panels PVC back panels are made from ¹/4" PVC and meet UL94 V-0.



To Fit	Part	Wei	ght		2	9	5
Enclosures	Numbers	lbs.	(kg)	in.	(mm)	in.	(mm)
HP1612B	PMB1612	1.10	(0.5)	14.37	(365)	9.84	(250)
HP2016B	PMB2016	2.65	(1.2)	18.30	(465)	13.78	(350)
HP2416C	PMB2416	3.09	(1.4)	22.24	(565)	13.78	(350)
HP3020D	PMB3020	4.63	(2.1)	26.18	(665)	17.72	(450)
HP3325D	PMB3325	6.62	(3.0)	30.11	(765)	21.65	(550)

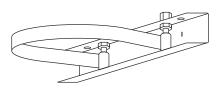
-	E	

Slotted Back Panels Zinc dichromated coated steel plates perforated for addition of electrical circuitry.

To Fi	t	Part	We	ight		D		E
Enclosu	res	Numbers	lbs.	(kg)	in.	(mm)	in.	(mm)
HP161	2B	PMR1612	1.54	(0.7)	13.74	(349)	9.8	(251)
HP201	6B	PMR2016	2.87	(1.3)	17.72	(450)	13.82	(351)
HP241	6C	PMR2416	3.53	(1.6)	21.85	(555)	13.82	(351)
HP302	0D	PMR3020	5.07	(2.3)	25.39	(645)	17.76	(451)
HP332	5D	PMR3325	7.06	(3.2)	29.53	(750)	21.69	(551)

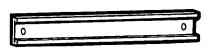
Refer to the Enclosure Accessories section for back panel accessories.

Pole Mounting Set



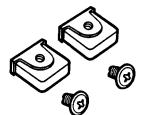
Part Numbers	To Fit To Enclosures	Standard Carton Quantity
HPPF300	HP1612B	1
HPPF400	HP2016B HP2416C	1
HPPF500	HP3020D	1
HPPF600	HP3325D	1

35 mm Symmetrical DIN Rail



Part Numbers			Std. Ctn. Qty.
HPCO300	HP1612B	11.02	1
HPCO400	HP2016B, HP2416C	14.96	1
HPCO500	HP3020D	18.90	1

Rail Mounting Insert



Part Number	Features	Standard Carton Quantity
HPRFK	Fits all enclosures	1

Wall Mounting Set (includes brass inserts and installation tools)



Part	Standard Carton	Standard Carton
Number	Quantity	Weight (lbs.)
HPWMF	4	0.1

Blanking Grommet To close off openings on enclosure backs.

Part Numbers	Fits Enclosure Sizes	Description	Std. Ctn. Qty.	Std. Ctn. Wt. (lbs.)
HPBNGB	16 x 12 and 20 x 16	Blanking Grommet	Set of 4	1.00
HPBNGC	24 x 16, 30 x 20 and 33 x 25	Blanking Grommet	Set of 4	1.00

Fixing Accessories For Slotted Plates



FIXING NUT Part Type Std. Ctn. Numbers Of Thread Qty.			FIXING BOLT WITH WASHER Part Length Std. Ctn Numbers (in.) Qty.		
HPFA4	M4	100	HPFB104	.39	100
HPFA4	M4	100	HPFB164	.63	100
HPFA5	M5	100	HPFB125	.47	100
HPFA5	M5	100	HPFB185	.71	100
HPFA6	M6	100	HPFB126	.47	100
HPFA6	M6	100	HPFB186	.71	100

For slotted back panels, see page 34

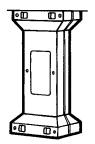
Back Panel Depth Adjustable Supports

Supports designed to fit 7.87" (200 mm), 9.84" (250 mm), 11.81" (300 mm) and 13.78" (350 mm) deep enclosures. Self-positioning slots allow for adjustment every .49" (12.5 mm). Made of zinc dichromated coated steel.



To Fit Enclosures	Part Numbers	A in./mm	B in./mm	Standard Carton Quantity
HP1612B & HP2016B	HPLM200 HPLM200	5.98/152	3.90/99	1 set of 4
HP2416C	HPLM250	8.07/205	4.13/105	1 set of 4
HP3020D & HP3325D	HPLM300 HPLM300	10.04/255	8.07/205	1 set of 4

Pedestal Mount



Part	To Fit	Standard
Number	To Enclosures	Carton Qty.
HPSFS1	HP2016B HP2416C	1

Draining Device* For 3R Rating and condensation build-up.



Part	Standard
Number	Carton Qty.
HPVEA9	1

*Factory installation available.

Air Vents* NEMA 1 Rated only.

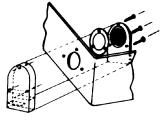


Part Numbers	Style	Standard Carton Qty.
HPVM25	For fitting outside of all enclosures	1
HPVM35	For fitting inside of all enclosures	1

*Factory installation available.

Enclosure Ventilator* Allows any size enclosure to

breathe, yet remains watertight.

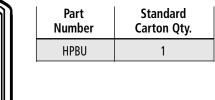


Standard Part

Number	Carton Qty.
HVM27	1

*Factory installation available.

Coupling Frame For Himeline HP Enclosures HP3020D and HP3325D



Replacement Standard Handle



Part	Standard Carton	Standard Carton
Number	Quantity	Weight (lbs.)
HPRSH	1	

Locks For Himeline HP Enclosures



Replacement Door Lock

Part	Std.
Number	Ctn. Qty.
HPRLA	1

For replacement handle, order HPRSH.



Cylinder Key Lock (Keyed Alike)

Part Number	Std. Ctn. Qty.	
HPTPLM	1	

For replacement key, order HPRKO.



Padlocking Service

Part	Std.
Number	Ctn. Qty.
HPPLH	1

Enclosures Factory Modifications

For All Enclosures



Painted JIC enclosure with painted back panel. Installed clear cover with handle and quick-release latch.



Color molded JIC unit with addition of window and pushbuttons.



Molded junction box painted with addition of mounted in-use weatherproof cover.



Painted JIC enclosure with pocket installed in cover for control pad.

Color Molded Enclosures

All Circuit Safe[®] enclosures can be molded in a variety of colors. Minimum quantities for single shipment or releases against blanket orders are required.

Painted/Silkscreened Enclosures

All enclosures can be painted, interior and exterior, or by special request. Enclosure covers can also be silkscreened on request.

EMI/RFI Protection

For applications where Radio Frequency Interference is a factor, the interior can be coated with an acrylic base paint with a nickel filler. Windows can be covered with fine copper mesh.

Other Modifications Available

Our factory is capable of modifying any of our enclosures to a customer's specifications. Factory's capabilities include:

- Precision milling of button holes, windows, and pockets for keypad installations.
- Hole tapping.
- Ventilators.
- Mounting bosses.
- Access windows.
- Hinged windows.
- Mounted in use weatherproof covers.
- Handles for portable units.
- Latches.
- Enclosure coolers.
- Cylinder locking systems.
- And more!

NEMA Types – Definitions Pertaining to Nonhazardous Locations

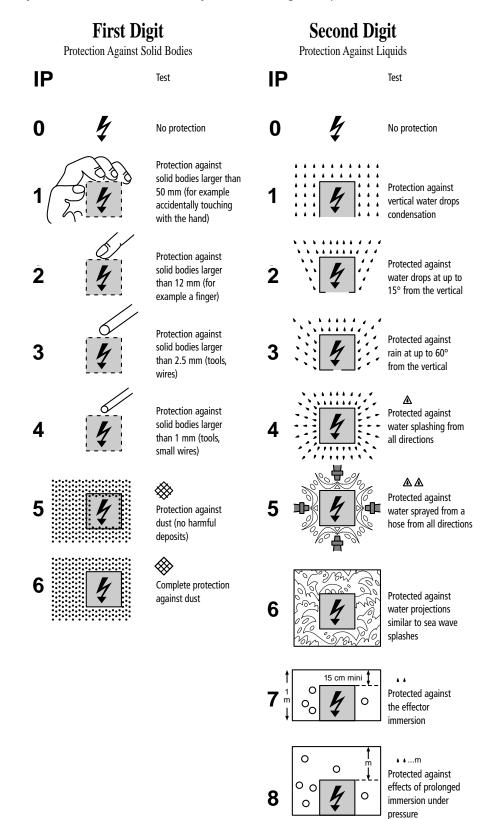
Enclosures for Electrical Equipment

An enclosure is a surrounding case constructed to provide protection from accidental contact with the enclosed equipment and to provide protection to the enclosed equipment from specified environmental conditions. A brief description of the more common types of enclosures used by the electrical industry follows.

Type 1 Enclosure:	Intended for indoor use primarily to provide protection against contact with enclosed equipment and a degree of protection against falling dirt.
Type 2 Enclosure:	Intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.
Type 3 Enclosure:	Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet and external ice formation.
Type 3R Enclosure:	Intended for outdoor use primarily to provide a degree of protection against falling rain, sleet and external ice formation.
Type 3S Enclosure:	Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, and sleet, and to provide for operation of external mechanism when ice laden.
Type 3X Enclosure:	Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet, external ice formation, and corrosion.
Type 3SX Enclosure:	Intended for outdoor use primarily to provide a degree of protection against wind-blown dust, rain, sleet, and corrosion, and to provide for operation of external mechanism when ice laden.
Type 4 Enclosure:	Intended for indoor or outdoor use primarily to provide a degree of protection against wind-blown dust and rain, splashing water and hose-directed water.
Type 4X Enclosure:	Intended for indoor or outdoor use primarily to provide a degree of protection against corrosion, wind-blown dust and rain, splashing water and hose-directed water.
Type 6 Enclosure:	Intended for indoor or outdoor use primarily to avoid a degree of protection against contact with enclosed equipment, falling dirt, hose-directed water, entry of water during occasional temporary submersion at a limited depth and external ice formation.
Type 6P Enclosure:	Intended for indoor or outdoor use primarily to provide a degree of protection against contact with enclosed equipment, falling dirt, hose-directed water, entry of water during prolonged submersion at a limited depth and external ice formation.
Type 12 Enclosure:	Intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping noncorrosive liquids.
Type 13 Enclosure:	Intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil and noncorrosive coolant.

International Standards IP Protection Classification Data

The letters IP followed by three characteristic numbers symbolize the degree of protection.



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Carflex Fittings & PVC Male Terminal Adapters Trade Sizes	Nominal Size (in.)	Actual Size (in.)	Actual Size (mm)
1/2	.875	.879	22.4
3/4	1.093	1.107	28.2
1	1.344	1.357	34.6
1 1/4	1.813	1.699	43.2
1 1/2	1.938	1.949	49.6
2	2.375	2.413	61.5
2 1/2	2.875	2.914	74.0
3	3.5	3.539	89.8
3 1/2	4	4.044	102.7
4	4.5	4.544	115.4
5	5.625	5.675	143.7

Clearance Holes For Carflex® Fittings or PVC Male Terminal Adapters

Engineering Properties Of Enclosures

Property	Test Method	Opaque Polycarbonate Covers & Boxes	Clear Polycarbonate Cover	FRP
Thermal And Mechanical				
Temperature Range (°F)	-	-30° to 230°	-30° to 230°	-58° to 320°
Specific Gravity (oz./in ³)	ASTM D792	1.20	1.20	1.79
Thermal Conductivity (BTU•in/hr•ft ² •°F)	ASTM D177	1.35	1.35	1.68
Heat Deflection Temperature @ 264 PSI (°F)	ASTM D648	265	260	392
Tensile Strength (PSI)	ASTM D638	8,800	9,000	13,000
Flexural Strength (PSI)	ASTM D790	13,500	14,000	19,000
Compressive Strength @ 10% Deformation (PSI)	ASTM D695	12,500	12,500	24,000
Impact Strength IZOD Notched (ft.lbs./in.)	ASTM D256	12	12	12
Water Absorption – 24 hrs. @ 73°F (%)	ASTM D570	0.15	0.15	0.17
Electrical				
Dielectric Strength (VOLTS/MIL.)	ASTM D149	380	380	467
Dielectric Constant	ASTM D150			
60 Hz		3.0	3.0	-
100 Hz		-	-	-
106		2.96	2.96	-
Volume Resistivity @ 73°F (OHM-CM)	ASTM D257	>1016	>1016	2.0 x 10 ¹⁵
Arc Resistance (SEC)	ASTM D495	120	120	200+

Environmental Resistance Table: E-Excellent, G-Good, L-Limited, U-Unsatisfactory

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC		PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Acetaldehyde	U			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Aromatic Hydrocarbons	U			U
Acetanide	U	LU	-	-	Arsenic Acid	E	Ē		Ē
Acetate Solvent	U	U	-	U	Arsenic Salts	Ē	E .	-	
Acetic Acid	Ŭ	G	Ē	Ē	Asphalt	Ē	Ŭ		
Acetic Acid 20%	Ŭ	Ĕ	Ē	Ē	Barium Carbonate	Ē	Ĕ	E	E
Acetic Acid 80%	Ĭ	Ğ	Ē	Ē	Barium Chloride	Ē	Ē	Ē	Ē
Acetic Acid, Glacial	Ū	Ğ	Ē	Ē	Barium Cyanide	Ū	-	-	-
Acetic Anhydride	U	U	E	U	Barium Hydroxide	E	U	U	E
Acetone	U	U	U	U	Barium Nitrate	E	U	-	E
Acetyl Bromide	U	-	-	-	Barium Sulfate	G	U	E	E
Acetyl Chloride (dry)	L	U	-	U	Barium Sulfide	E	-	E	E
Acetylene	E	U	-	-	Beer	E	E	-	E
Acrylonitrile	G	U	-	-	Beet Sugar Liquids	E	-	-	E
Adipic Acid	Ę	-	-	-	Benzaldehyde	U	U	U	G
Alcohols:Amyl Alcohols:Benzyl	E U	G	-		Benzene Benzene Sulfonic Acid	E	U U	E	U E
Alcohols:Butyl	E	Ē	-	U E	Benzoic Acid	Ē	G	Ľ	G
Alcohols:Diacetone	G	Ľ	-	Ē	Benzol		U	-	G
Alcohols:Ethyl	U I	G	-	Ē	Benzonitrile		E		-
Alcohols:Hexyl	Ē	-	-	Ē	Benzyl Chloride	-	-	-	U
Alcohols:Isobutyl	Ē	-	-	Ē	Bleaching Liguors	E	-	-	-
Alcohols:Isopropyl	Ē	E	-	Ē	Borax (Sodium Borate)	Ē	-	-	E
Alcohols:Methyl	Ē	Ğ	-	Ē	Boric Acid	Ē	-	E	Ē
Alcohols:Octyl	-	-	-	E	Bromine	L	L	-	E
Alcohols:Propyl	E	-	-	E	Butadiene	L	U	-	U
Aluminum Chloride	E	E	E	E	Butane	L	U	-	U
Aluminum Chloride 20%	E	E	-	E	Butanol (Butyl Alcohol)	L	G	-	E
Aluminum Fluoride	E	-	-	E	Butyl Amine	U	U	-	U
Aluminum Hydroxide	E	Ģ	-	E	Butyl Ether	E	-	-	U
Aluminum Nitrate	G	E	-	-	Butyl Phthalate	-	U	-	E
Aluminum Potassium Sulfate 10% Aluminum Potassium Sulfate 100%	E E	E	-	E	Butylacetate Butylene	ų	U U	U	G
Aluminum Polassium Sunate 100%	Ē	Ē	Ē	E	Butyric Acid	E G	U	-	U
Amines	Ŭ	Ŭ	- E	Ū	Calcium Bisulfate	-	U		-
Ammonia 10%	G	Ŭ	_	Ē	Calcium Bisulfide	E	-	-	Е
Ammonia Nitrate	G	-	-	Ē	Calcium Bisulfite	Ğ	U	-	Ē
Ammonia, anhydrous	Ĕ	U	-	Ğ	Calcium Carbonate	Ē	Ĺ	E	Ē
Ammonia, liquid	E	U	L	-	Calcium Chlorate	G	-	E	-
Ammonium Acetate	E	-	-	-	Calcium Chloride	L	-	E	E
Ammonium Bifluoride	E	-	-	E	Calcium Hydroxide	G	U	U	E
Ammonium Carbonate	E	-	L	E	Calcium Hypochlorite	G	U	L	E
Ammonium Caseinate	-	-	-	E	Calcium Nitrate	E	E	E	E
Ammonium Chloride	E	E	E	E	Calcium Oxide	G	-	-	E
Ammonium Hydroxide Ammonium Nitrate	Ę	U	L	E	Calcium Sulfate	G	E	E	Ē
Ammonium Nitrate Ammonium Oxalate	E E	Ē	L	E	Calgon Cane Juice	Ē	-	-	E
Ammonium Oxalate Ammonium Persulfate	E	C	-	Ē	Carbolic Acid (Phenol)	Ŭ	- U	-	- U
Ammonium Phosphate, Dibasic	Ē	Ē	_	Ē	Carbon Bisulfide	Ŭ	-	L	-
Ammonium Phosphate, Monobasic	Ē	-	-	Ē	Carbon Dioxide (dry)	Ĕ	_	-	E
Ammonium Phosphate, Tribasic	Ĕ	-	-	Ē	Carbon Dioxide (wet)	Ē	-		Ē
Ammonium Sulfate	E	E	E E	Ē	Carbon Disulfide	Ū	U	-	Ū
Ammonium Sulfite	E	-	E	E	Carbon Monoxide	E	-	-	E
Amyl Acetate	U	U	L	U	Carbon Tetrachloride	U	U	E	U
Amyl Alcohol	E	G	L	L	Carbon Tetrachloride (dry)	-	-	-	U
Amyl Chloride	U	-	U	U	Carbon Tetrachloride (wet)	:	-	-	U
Aniline	L	U	U	U	Carbonated Water	Ę	-	-	E
Aniline Hydrochloride	G	U	-	-	Carbonic Acid	E	E	-	E
Antifreeze Antimony Trichloride	E	- E	- C	E	Catsup Chloric Acid	Ē	-	-	EU
Antimony frichloride Aqua Regia (80% HCl, 20% HNO3)		E U	E	E U	Chloric Acid Chlorine (dry)	E U		-	G
rqua negla (00 /0 mel, 20 /0 mi003)	L	U	-	0		U	•	-	U

Environmental Resistance Table: E-Excellent, G-Good, L-Limited, U-Unsatisfactory

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe IEA Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryi Circuit Safe Medium JIC	Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Chlorine Water	E	-	E	L	Ferrous Sulfate	E	E	E	E
Chlorine, Anhydrous Liquid	Ū	L	-	Ğ	Fluoboric Acid	Ē	-	-	Ē
Chloroacetic Ácid	G	U	-	-	Fluorine	U	L	-	-
Chlorobenzene (Mono)	U	U	U	U	Fluosilicic Acid	U	E	-	E
Chlorobromomethane Chloroform	U U	- U	-	- U	Formaldehyde 100%	E	E	- E	Ę
Chlorosulfonic Acid	U	U	-	U	Formaldehyde 40% Formic Acid	Ē	Ē	E	E E
Chocolate Syrup	-	Ē	-	Ē	Freon 113	Ğ	G	-	Ū
Chromic Acid 10%	E	Ğ	E	Ē	Freon 12	Ĕ	-	-	Ŭ
Chromic Acid 30%	E	L	-	U	Freon 22	E	-	-	G
Chromic Acid 5%	E	G	-	E	Freon TF	G	-	-	-
Chromic Acid 50% Chromium Salts	U E	U	-	U	Freon® 11 Fuel Oils	E	- G	-	G
Citric Acid	G	Ē	E	Ē	Furan Resin	Ē	G	-	G
Citric Oils	-	- L	-	Ē	Furfural	Ŭ	U	-	U
Clorox® (Bleach)	E	-	-	Ē	Gallic Acid	Ğ	-	-	Ĕ
Copper Chloride	E	-	-	E	Gasoline (high-aromatic)	E	E	-	G
Copper Cyanide	E	U	-	E	Gasoline, leaded, ref.	G	E	E	G
Copper Fluoborate	E	-	-	-	Gasoline, unleaded	L	E	-	U
Copper Nitrate Copper Sulfate >5%	E	U E	-	E	Gelatin Glucose	G E	- E	- E	E E
Copper Sulfate 5%	Ē	Ē	_	Ē	Glue, P.V.A.		-	L -	- L
Cresols	Ū	Ū	U	Ū	Glycerin	Ē	E	E	E
Cresylic Acid	U	Ŭ	-	-	Glycolic Acid	G	-	-	-
Cupric Acid	E	E	-	E	Grease	E	-	:	-
Cyclohexane	U	G	-	U	Heptane	L	G	E	G
Cyclohexanone Detergents	U E	UE	-	U E	Hexane Hydraulic Oil (Petro)	G	U	U	G
Diacetone Alcohol	Ū	L U	-	-	Hydraulic Oil (Synthetic)	Ē		-	
Dichlorobenzene	Ŭ	Ŭ	-	-	Hydrazine	-	U	-	-
Dichloroethane	U	Ŭ	-	E	Hydrobromic Acid 100%	E	-	-	G
Diesel Fuel	E	E	-	U	Hydrobromic Acid 20%	G	-	-	G
Diethyl Ether	U	U	-	-	Hydrochloric Acid 100%	Ų	U	- -	Ę
Diethylamine Diethylene Glycol	UL	U G	-	Ē	Hydrochloric Acid 20% Hydrochloric Acid 37%	E G	G U	E	E E
Dimethyl Aniline	Ū	U	- U	Ū	Hydrochloric Acid, Dry Gas	E	-	L -	Ē
Dimethyl Formamide	Ŭ	Ŭ	-	Ŭ	Hydrocyanic Acid	Ğ	-	-	Ē
Diphenyl Oxide	Ŭ	-	-	-	Hydrocyanic Acid (Gas 10%)	E	G	-	L
Dyes	G	-	-	E	Hydrofluoric Acid 100%	L	U	-	U
Epsom Salts (Magnesium Sulfate)	Ē	E	-	E	Hydrofluoric Acid 20%	G G	UU	-	
Ethane Ethanol	E	G	-	- E	Hydrofluoric Acid 50% Hydrofluoric Acid 75%		U		UU
Ethanolamine	Ū	-	-	Ē	Hydrofluosilicic Acid 100%	Ğ	-	-	Ğ
Ether	U	-	L	U	Hydrofluosilicic Acid 20%	E	-	-	G
Ethyl Acetate	U	U	L	E	Hydrogen Gas	E	E	-	E
Ethyl Benzoate	U	U	-	E	Hydrogen Peroxide 10%	Ę	Ę	-	Ę
Ethýl Chloride Ethyl Ether	U U	U	LU	U U	Hýdrogen Peroxide 100% Hydrogen Peroxide 30%	E	E	- E	E E
Ethylene Bromide	U	- U	-	-	Hydrogen Peroxide 50%	Ē	Ē	Ē	- L
Ethylene Chloride	Ŭ	Ŭ	-	U	Hydrogen Sulfide (aqua)	Ğ	Ē	-	Ε
Ethylene Chlorohydrin	Ŭ	Ū	E	-	Hydrogen Sulfide (dry)	E	-	-	-
Ethylene Diamine	U	E	-	U	Hydroquinone	G	-	-	-
Ethylene Dichloride	U	U	U	U	Hýdroxyacetic Acid 70%	U	-	-	-
Ethylene Glycol Ethylene Oxide	E U	G	E	E	Ink Iodine	L E		-	- L
Fatty Acids	E	G	-	Ē	lodine (in alcohol)	E	_	-	- L
Ferric Chloride	E	Ĕ	E	Ē	lodoform	Ē	-	-	-
Ferric Nitrate	E	E	E	E	Isooctane	E	G	-	U
Ferric Sulfate	E	E	Ę	Ē	Isopropyl Acetate	U	U	-	-
Ferrous Chloride	E	U	E	E	Isopropyl Ether	G	U	-	-

Environmental Resistance Table: E-Excellent, G-Good, L-Limited, U-Unsatisfactory

Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC	Н	PVC Himeline HE - Dpaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Isotane	E			-	Nickel Nitrate	E	U		E
Jet Fuel (JP3, JP4, JP5)	L	Ē	-	U	Nickel Sulfate	Ē	E	-	Ē
Kerosene	Ē	Ū	-	Ŭ	Nitrating Acid (<15% HNO3)	Ū	-	-	-
Ketones	Ū	Ŭ	-	Ŭ	Nitrating Acid (>15% H2SO4)	Ŭ	-	-	-
Lacquer Thinners	U	G	-	U	Nitrating Acid (_1% Acid)	U	-	-	-
Lacquers	U	U	-	U	Nitrating Acid (_15% H2SO4)	U	-	-	-
Lactic Acid	G	G	E	E	Nitric Acid (20%)	E	G	G	G
Lard	E	E	-	E	Nitric Acid (50%)	Ģ	Ģ	-	G
Lead Acetate	G		-	E	Nitric Acid (5-10%)	E	E	-	E
Lead Nitrate Lead Sulfamate	E G	Ē	-	E -	Nitric Acid (Concentrated) Nitrobenzene	G U	U	-	G U
Lime	G		-		Nitromethane	G	U	L	U
Linoleic Acid	E		-	_	Nitrous Acid	Ē	-	-	-
Lithium Chloride	Ŭ	G	-	-	Nitrous Oxide	Ē	-	-	-
Lithium Hydroxide		Ŭ	-	-	Oils:Aniline	U	-	-	U
Lubricants	G	E	-	L	Oils:Citric	G	E	-	E
Lye: Ca(OH)2 Calcium Hydroxide	G	U	-	E	Oils:Creosote	L	-	-	U
Lye: KOH Potassium Hydroxide	G	U	-	E	Oils:Diesel Fuel (20, 30, 40, 50)	G	-	-	U
Lye: NaOH Sodium Hydroxide	E	U	-	E	Oils:Fuel (1, 2, 3, 5A, 5B, 6)	E	G	-	E
Magnesium Bisulfate	E	E	Ē	-	Oils:Hydraulic Oil (Petro)	Ę	-	-	-
Magnesium Carbonate Magnesium Chloride	G G	E	E	E	Oils:Hydraulic Oil (Synthetic) Oils:Mineral	E G	G	-	Ē
Magnesium Hydroxide	E	Ē	G	Ē	Oils:Olive	U I	E	-	Ē
Magnesium Nitrate	Ē	Ĕ	-	Ē	Oils:Orange	i	L	-	-
Magnesium Oxide	-		-	-	Oils:Pine	Ū	Ē	-	-
Magnesium Sulfate (Epsom Salts)	E	E	E	E	Oils:Rosin	Ĺ	-	-	-
Maleic Acid	E	-	-	E	Oils:Silicone	E	-	-	E
Malic Acid	E		-	-	Oils:Transformer	G	-	-	-
Manganese Sulfate	L	E	-	E	Oils:Turbine	E	-	-	÷
Mayonnaise	U U	-	-	-	Oleic Acid	LU	-	E	E
Meĺamine Mercuric Chloride (dilute)	E	Ē	-	- E	Oleum 100% Oleum 25%	UU	-	-	E
Mercuric Cyanide	Ē	L	_	L .	Oxalic Acid (cold)	G	_	E	E
Mercurous Nitrate	Ē	E	-	E	Ozone	G	E	-	-
Mercury	Ē	Ū	-	Ē	Palmitic Acid	G	-	-	-
Methane	G		-	-	Paraffin	G	E	-	E
Methanol (Methyl Alcohol)	E	G	L	E	Pentane	E	E	-	-
Methyl Acetate	U	U	-	-	Perchloric Acid	L	-	-	
Methyl Acetone	U	-	-	-	Perchloroethylene	L	U	-	U
Methyl Alcohol 10% Methyl Bromide	EU	G	-	E	Petrolatum Petroleum	G	-	-	- U
Methyl Butyl Ketone	E	Ū	-	-	Phenol (10%)	-	G	-	Ŭ
Methyl Cellosolve	Ū	Ŭ	-	-	Phenol (Carbolic Acid)	Ū	Ŭ	-	Ŭ
Methyl Chloride	Ŭ	Ŭ	-	U	Phosphoric Acid (>40%)	Ğ	Ĕ	-	Ĕ
Methyl Dichloride	E		-	-	Phosphoric Acid (crude)	G	E	-	E
Methyl Ethyl Ketone	U	U	E	U	Phosphoric Acid (molten)	U	-	-	-
Methyl Isobutyl Ketone	U	U	-	U	Phosphoric Acid (_40%)	G	E	-	E
Methyl Isopropyl Ketone	U	U	-	U	Phosphoric Acid Anhydride	- C	U	-	-
Methyl Methacrylate Methylamine	EU		-	-	Phosphorus Phosphorus Trichloride	E U	- L	-	-
Methylene Chloride	U	Ū	- U	U	Photographic Developer	E	E		Ē
Mineral Spirits	E	I I	-	Ē	Photographic Solutions	Ĕ	Ē		Ē
Monochloroacetic acid	-	Ū	-	-	Phthalic Anhydride	U	Ē	-	-
Monoethanolamine	U	-	-	E	Picric Acid	U	Ū	-	-
Morpholine	-	U	-	U	Potash (Potassium Carbonate)	E	-	L	E
Motor oil	G	E	-	E	Potassium Bicarbonate	Ę	-	-	E
Naphtha	E	G	E	U	Potassium Bromide	E	E	-	E
Naphthalene	U	-	-	U	Potassium Chlorate	Ę	E	-	E
Natural Gas Nickel Chloride	E E	- E	-	- E	Potassium Chloride Potassium Chromate	E E	E	E	E E
NICKEI CHIOHUE	E	E	-	L	i otassium chiromate	E	-	E	Ľ

Environmental Resistance Table: E-Excellent, G-Good, L-Limited, U-Unsatisfactory

Protecture C C E C E Protecture First Outload E - E E Standt Outload E - - E Protecture First Outload E U L E E Standt Outload E - - E E Protecture Control E - - - - E E - - E E Standt Outload E - - E E Standt Outload E - - E E Standt Outload E - - U U - E Standt Outload E - - U U - E E Standt Outload	Chemical	PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC		PVC Himeline HE - Opaque Cover w/Base	Polycarbonate Circuit Safe NEMA Circuit Safe JIC Himeline HE - Clear Cover w/Base Himeline HS - Opaque w/Clear Lids	FRP (Fiberglass Reinforced Polyester) Himeline HS - Bases Himeline HP Himeline HLA/HLS Himeline HLP	Noryl Circuit Safe Medium JIC
Plassium Environate E E E Stanic Fluxborate - - - - E E Plassium Introvende E - E E Stanic Revende E - E E Plassium Introvende E - - - Stanic Revende U				-					-	
Protestamin Perroganide E I E E Stannous Chloride E - - E Protestamin Perroganide E U L E Standard Solvent L E - U E E Protestamin Miproduck (Laint Person) G - - - Synthetic (March March M	Potassium Dichromate	F	F	-				-	-	F
Protocol E - E E Start Add G E - E Protestim Myood/orite G - - - Suffare (Lupon) G - - E Protestim Myood/orite E E E Suffare (Lupon) G -<		F	-	F			F	-	-	
Phassim Hypothe Gaster May Diagonal Constraint Mysource E U L E Standard Solvent L E - U U I E - E - - Standard Solvent U U I E E E Sulfate (Lipuxs) G I - - E E Sulfate (Lipuxs) G I I E E E E E Sulfate (Lipuxs) I G I E E E E E E E E E E E E E E E I I D D D D D D D D D D D D D D D D	Potassium Ferrocyanide	Ē	-					E	-	
Production G - - - Syreme U U - E Potastim Nitrate E E E E E E E Potastim Nitrate E E E E Potastim Nitrate E E E Suffir Choride E I - E Potastim Suffic E E E E Potastim Suffic E E - E Potastim Suffic E I - E Potastim Suffic E I - E Potastim Suffic E - - E E Potastim Suffic E I - - E E Potastim Suffic E I - - E Potastim Suffic E I - I I I I I I I I I E E Potastim Suffic Advin Suffic A	Potassium Hydroxide (Caustic Potash)		U	L		Stoddard Solvent	L	E	-	
Photscim Nitrate E E E E E E E Potassim Preasmin Preasmin F Suffur Dioxide E - - E Potassim Suffur Dioxide E E E E E - - E Potassim Suffue E E E Suffur Trioxide (ryl) E - - U Propage (inprefed) E L - E Suffur Trioxide (ryl) E E E - - U Proprise G - - G Suffur Add (r) E </td <td>Potassium Hypochlorite</td> <td>G</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>U</td> <td>-</td> <td>E</td>	Potassium Hypochlorite	G	-	-	-			U	-	E
Platsame - - - - Suffar Diaxide E - - E Potassim programate E E E E Suffar Headinorite G - - - - Personantic programme G - - UP Programe U U - E Suffar Chaids (cpl) E G U - E Programe U U - U - E Programe Programe U U - - U Suffar Diaxide (cpl) U U - U U - U U - U U - U U - U U - U U - U U U U U U U U U			-	-	-	Sulfate (Liquors)		-	-	
Platsimin Permanganate E E E E Sulfur Disorde (dry) E E - E Potassimin Sulfide E - - E Sulfur Trioxide (dry) E - - U Propane (lique)[ethol) E L - - E Sulfur Trioxide (dry) E E E U U - - U U Prophene U U - - Sulfur Add (dr (Dry) E E E U U - E Sulfur Add (dr (Dry) U U - - E E Prophene U U - - E Sulfur Add (dro) Concentrated) U U - - E Sulfur Add (dro) Concentrated) U U - U - - E Sulfur Add (dro) Concentrated) U U - U - U - U - U Sulfur Add (fro) Conx) Sulfur Add (fro) Conx)		E	E	E	E			-	-	
Platskim Sulfate E E E Sulfu Floating G - - U Propare (npueled) E L - E Sulfur Troicing E - U Propare (npueled) E L - E Sulfur Add (1075%) E G U E Propare (npueled) U U - - Sulfur Add (1075%) U U - - E E P P P P Sulfur Add (1075%) U U - - E E P - E E - - E E - - E Sulfur Add (1075%) U U - - E E Sulfur Add (1076%) E E - - E E Sulfur Add (1076%) E E - - E Sulfur Add (1076%) E E - - E Sulfur Add (1076%) E E Sulfur		-	-					-	-	
Phase Number E - E Suffar Traixade (rely = 1) E Suffar Traixade (rely = 1) E Suffar Add (<10%) E E E E E U Prophene (rely = 1) G - - Suffar Add (<10%)						Sulfur Dioxide (dry)		Ł	-	Ŀ
Propage (hyperise) E L - E Suffar Translate - - U U E			E	E				-	-	-
Projene G - - Suffarc Add (-10%) E F P Prodine U U U - - Suffarc Add (-10%) U U U - - E Progalic Add E - - Suffarc Add (-10 Concentrated) U U - - E E - - E E - - E E E - - E E E - - E E E - E E E E E E E E E E E E E - - E E E E E E E E E E E E E E <td< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></td<>			-						-	
Projence Oycol L G Suffur: Acid (1275%) E G U U E F Progale Acid E - - - Suffur: Acid (1001 concentrated) U - E E Resorinal L G - - Suffur: Acid (1001 concentrated) U - - E Rosins L - - - Suffur: Acid (1001 concentrated) E E - - C E Salt form (Nacl strutted) E E - - E E Tanning Lingurs E L - - E E Suffur: Acid (1011 E E - - C U U U U U U U - U Suffur: Acid (1011 E E - - E E Suffur: Acid (1011 E L - - U U U U U U U <td< td=""><td></td><td></td><td>-</td><td>_</td><td>L .</td><td></td><td></td><td>F</td><td>F</td><td></td></td<>			-	_	L .			F	F	
Pyridie U U - G Suffrick Add (75:100%) U U - - E Resortinal L G - - Suffrick Add (0 concentrated) U U - U - U E E - E E - E E - E E - - E E Suffrick Add (2 concentrated) U U - - E E E - - E E E - - E E I - - E E E - - E E E I - - E	Propylene Glycol	l i	G	-	-	Sulfuric Acid (10-75%)				
Pirogaliz Acid E - - Sulfrix Acid (cloid concentrated) U - - E Restrictial L G - - Sulfrix Acid (hot concentrated) U U - U E Restrictial L - - E Sulfrix Acid (hot concentrated) E L - E E Salt före (MaCl saturated) E E E - E E Immin Linguous E L - E E Silver Nitrate E E - E E Tartar Acid (hot concentrated) U U - U U - U U - U U Solicon Acid (hot concentrated) E E E Immin Linguous E E E Immin Linguous Solicon Acid (hot concentrated) U U U U Solicon Acid (hot concentrated) E Solicon Acid (hot concentrated) E Immin Linguous Immin Linguous E		Ū		-	G	Sulfuric Acid (75-100%)			-	
Rescinal L G - Sulfuir, Acid (hot concentrated) U U - U Sailor, CAdi G E - - Talaw - - E Sailor, CAdi G E - E Sailor, CAdi E L - E Sailor, CAdi Sailor, CAdi E - E E - E E Sailor, CAdi E E E E - E I D D U U U U U U U U U U U U U G G E E Technonethylene U U U U G G G	Pyrogallic Acid		-	-		Sulfuric Acid (cold concentrated)		-	-	
Salojič, Add G E - - - - - - - E E Salt frim (MaCl sturated) E E E - E Taming Liguors E L - E Silver Bronide - - E Taming Liguors E L - - E Silver Bronide - - E E Taming Liguors E - - E E Silver Bronide - - - E E E - - E E E - - U U U U U U U U U U U U Soluto Acta Acta Acta Acta Acta Acta Acta Acta	Resorcinal	L	G	-	-			U	-	U
Sah Brine (HaCl saturated) E E - E Tamic Acid E L - E Sal Water E E - E Tamic Acid E - E E - E E Tatafic Acid E - - E <td></td> <td>L</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>E</td> <td>-</td> <td>-</td> <td></td>		L	-	-	-		E	-	-	
Sav MaterEE-ETanning LiquorsEESilver DirateEETatachardEEESilver NitrateEE-ETetrachloroethyleneUU-UUSilver NitrateEE-ETetrachloroethyleneUUULUSoda SolutionsEEE-ETetrachloroethyleneUUUUUSoda AltrinateGEEETin SaltsEUSodium AltrinateETichloroethraneLU-UUUUUUUSolution Solution Sol	Salicylic Acid	G		-			-	-	-	
Silicone E E Tartari Àdid E - E E E - U Juntaria E E - U </td <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>L</td> <td>-</td> <td></td>				-				L	-	
Silver BritrateETetrachonochhaneLUSilver NitrateEEE-ETetrachonochhaneUUULUSoda SolutorsEEE-ETetrachonochhaneUUULUSoda Ah (see Sodium Carbonate)EEE-ETetrachonochhaneESodium AktriateGEEEETichloraceta/caldGU-UUUSodium BicarbonateGEEEFichloracethaneU-UUSodium BicarbonateEEEFiceNopareEEGGCEEEGGCEEUUUUUUUUSodium CarbonateGGEEGGGC-EEGGGC- <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td>				-				-	-	
Silver Nitrate Saga Solutions Carbonate Sodian Actate Godium Actate GEE-ETetrachlorophyne Tin SaltsUULUSodia Ash (see Sodium Carbonate) Sodium Aktrate GEEEETin SaltsE <td< td=""><td></td><td></td><td>E</td><td>-</td><td></td><td></td><td>-</td><td>-</td><td></td><td></td></td<>			E	-			-	-		
Sape SolutionsEEFFFFFUUULUSodia Ah (see Solum Cahonate)GEEETindiana (foldo))UUU-USodium AluminateETindiana (foldo))UUU-USodium AluminateETindiana (foldo))UU-UUSodium BizarbonateEEEEETindiana (foldo))U-UUSodium BizarbonateEEEEETindiana (foldo))-UUUSodium BisuffiteEEE-EFFEESodium BisuffiteEEE-EFFEEESodium BisuffiteEEE-EEFEEESodium CarbonateEEEEEUUUULEESodium CarbonateEEEEEUrrefaUUULEESodium CarbonateEEEEEUrrefaUUCSSodium CarbonateEEEEEUrrefaUUSSodium			- F	-				-	-	
Sodia Ash (see Sodium Carbonate) E E E In Safs E - - - Sodium Actatate G E E Findinoracetic Acid G U - U U - - U U - - U U U - - U U U U U U U U U U U U U Sodiam State Sta		F		-					-	
Sodium ActenteGEEEToluene (Toluo)UUU-USodium AutuninateETirchloroactic AcidGU-USodium BrazoteGEE-Firchloroactic/AcidGU-UUSodium BrazoteEEEEFirchloroactic/HoneU-UUUSodium BisuffreEEE-ETircs/tohoropaneESodium BisuffreEEE-ETircs/tohoropaneESodium BisuffreG-EETircs/tohorophateUUUEUSodium CarbonateEE-ETirsodum PhosphateEESodium ChoroateEEEEUUUULESodium ChoroateEEEEUrreaUUUSodium ChoroateEE-EVinegarGEEEESodium ChoroateE-EVinegarGEEEESSodium ChoroateEEVinegarGESSodium ChoroateEEVinegarGES <t< td=""><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>-</td><td>-</td><td>-</td></t<>				-				-	-	-
Sodium Aluminate - - E Trichloroactic Acid G U - - U Sodium Brazoate G E - - Trichloroactic Acid G U - U U Sodium Brazoate E E E E Firchloroactic Acid U - U U Sodium Bisufate E E E - E Trichloroactic Acid U U - U U Sodium Bisufate E E E - E Trichloroactic Acid E U U U U U U E E Sodium Bisufate E E - E E Trichloroactic Acid E U U U U U U L E Sodium Bisufate E - E U First Acid Acid E U U U L E U L C Sodium Acid Acid		Ğ		E		Toluene (Toluol)		U	-	U
Sodium Bicarbonate E E E E F F Trichloroethylene U - U U Sodium Bisulfate E E E - E Trichloroethylene - - - U U Sodium Bisulfate E E E - E Tricresythopsphate U - - E E Sodium Bronide G - E E Tricresythopsphate E - - E E Sodium Aronate E E - - E U U U U L E U Sodium Aronate E E E Urea U U U L E U Sodium Aronate E E E Urica C C U U U U U U U Sodium Aronate E E E U/Instructure Sodium Chorate E E	Sodium Aluminate		-	-	E		G		-	-
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Sodium CarbonateEEE-ETurpentineUUUEUSodium ChlorateEEEEEUreaUULESodium Chromate-EEEUreaUUSodium Chromate-EEVarnishUUUSodium CyanideE-EVarnishUUSodium GrandeEEVinegarGEEEESodium FerrocyanideEEVinegarGGGSodium HydrosulfteLWater, Acid, MineGGESodium Hydrosule (20%)EEUUEWater, DiscilledEEEESodium Hydrosule (80%)EUUUEWater, SaltGEEESodium Hydrosule (80%)ELLEWater, SaltGEEESodium Hydrosule (80%)ELLEWater, SaltGEEESodium Hydrosule (80%)GWhite/Water (Paper Mill)EEESodium Mydrosule (80%)GE-			E	-				-	-	
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