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25135-13		Inspection Material Penetrant	08/06/73	14	14

QPL-25135-13 Inspection Material Penetrant 8/6/73

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MAY 1973

QPL-25135-13
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FSC 6850

QUALIFIED PRODUCTS LIST OF

PRODUCTS QUALIFIED UNDER MILITARY SPECIFICATION

MIL-I-25135

INSPECTION MATERIALS, PENETRANT

This list has been prepared for use by or for the Government in the procurement of products covered by subject specification and such listing of a product is not intended to and does not [illegible] product by the Department of Defense. [illegible] products [illegible] for the product as specified [illegible] effective [illegible] the application [illegible] is subject to change without notice [illegible] this list will [illegible] listing of a product does not [illegible] the specification [illegible] the information shown hereon for advertising or [illegible] purposes is expressly [illegible]

[illegible] for this qualified [illegible] Force [illegible] Ohio [illegible]

[illegible]

[illegible] EQUIPMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
[illegible] P II	Ardrox 996 Penetrant Ardrox 9PR2 Emulsifier Ardrox 9D6 Developer (non-aqueous) Ardrox 9D3 Developer (dry) Ardrox 9D71 Developer (wet)	120°F 140°F	2.68CS 29.0CS	CQ 17/68	Ardrox Ltd. P.O. Box 390 Niagara-on-the-Lake Ontario, Canada
[illegible] III	Ardrox 9D6 Penetrant Ardrox 9D6 Developer (non-aqueous) Ardrox 9D3 Developer (dry) Ardrox 9D71 Developer (wet)	163°F	6.36CS	CQ 8/68	
[illegible] IV	Ardrox 970P8 Penetrant Ardrox 9D6 Developer (non-aqueous) Ardrox 9D3 Developer (dry) Ardrox 9D71 Developer (wet)	132°F	[illegible]CS	CQ 9/68	
[illegible] V	Ardrox 985P1 Penetrant Ardrox 9PR4 Emulsifier Ardrox 9D6 Developer (non-aqueous) Ardrox 9D3 Developer (dry) Ardrox 9D71 Developer (wet)	215°F 195°F	[illegible] [illegible]CS	CQ 10/68	
[illegible] VI	Ardrox 985-73 Penetrant Ardrox 9PR4 Emulsifier Ardrox 9D71 Developer (wet) Ardrox 9D3 Developer (dry)	205°F 158°F	[illegible] 0.920	Q.750/69	
[illegible] VII	Ardrox 985-[illegible] Penetrant Ardrox 9PR3 Emulsifier Ardrox 9D6 Developer (non-aqueous)	205°F 192°F	[illegible] [illegible]CS	Q.750/69	

COMPONENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP IA 1/	DP 400 Chex-All Dye Penetrant C-570 Cleaner DW-530 Wet Developer	160°F None	5.88CS	MAA 63-70 " "	Automation Industries Inc. Sperry Products Div. Danbury, Connecticut
GROUP IV	FPW-500 Fluorescent Penetrant DD-535 Dry Developer DW-530 Wet Developer	165°F	4.88CS	MAA 63-71 " "	
GROUP V	FPE-505 Fluorescent Penetrant PE-520 Emulsifier DW-530 Wet Developer DD-535 Dry Developer	165°F 180°F	5.53CS	MAA 66-4 " " "	
GROUP IA	Fault-Finder 1012 Penetrant Fault-Finder 1011 Cleaner Fault-Finder 1013 Developer (non-aqueous)	205°F None None	2.5CS @72°F	MAA 68-39 " "	Green Industrial Products Company 12603 State Line Rd. Hebron, Illinois 60034
GROUP I	SKL-HF SKL-SP Formula B Spotchek Penetrant SKC-S Spot Chek Remover SKD-S Spot Chek Developer (non-aqueous) SKD-W Spot Chek Developer (wet) ZP-4 Developer (Dry)	205°F 125°F 125°F	4.3CS	LA 71-50 MAA 68-79 " LA 71-50Amd 1 "	Magnaflux Corporation 7300 W. Lawrence Ave. Chicago, Illinois 60656 PLANTS: Cleveland, Ohio London, England

1/ GROUP IA - Some components of this group designation contain chlorinated materials.

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
[illegible] IA	SKL-HF SKL-S Formula B Spot Chek Penetrant	205°F	4.3CS	LA 71-51	Magnaflux Corporation 7300 W. Lawrence Ave. Chicago, Illinois 60656 PLANTS: Cleveland, Ohio London, England
	SKC-HF Formula B Spot Chek Cleaner	None		MAA 65-25 And 1	
	SKD-HF Formula B Spot Chek Developer (non-aqueous)	180°F		HX 72-45	
	SKD-W Spot Chek Developer (wet)			LA 71-51 And 1	
	ZP-4 Developer (dry)			"	
[illegible] II	SKL-HF SKL-S Formula B Spot Chek Penetrant	205°F	4.3CS	LA 71-52	
	SKC-W Spot Chek Cleaner Emulsifier	128°F		ASRCE 61-79	
	SKD-HF Formula B Developer (non-aqueous)	180°F		HX 72-45	
	SKD-W Spot Chek Developer (wet)			LA 71-52 And 1	
	ZP-4 Developer (dry)			"	
[illegible] III	SKL-W Formula B Spot Chek Penetrant	220°F	11.8CS	HX 72-43	
	SKD-W Spot Chek Developer (wet)			ASRCE 61-80	
	SKD-HF Formula B Spot Chek Developer (non-aqueous)			HX 72-45	
	ZP-4 Zyglo Developer (dry)			ASRCE 63-61	
[illegible] IV	ZL-15 Zyglo Penetrant	205°F	3.1CS	MAA 68-82	
	ZP-4 Zyglo Developer (dry)			"	
	ZP-5 Zyglo Developer (wet)			"	
	ZP-9 Formula B Developer (non-aqueous)	180°F		HX 72-46	

COMPONENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
Group V	ZL-2A Zyglo Penetrant	222°F	3.4@72°F	MAA 67-49 16Jul69 Amend 1	Magnaflux Corp. 7300 W. Lawrence Ave. Chicago, Ill. 60656 PLANTS: Cleveland, Ohio London, England
	ZE-3 Zyglo Emulsifier	315°F	118.0CS@72°F	"	
	ZP-4 Zyglo Developer (dry)			"	
	ZP-5 Zyglo Developer (wet)			"	
	ZP-9 Formula B Developer (non-aqueous)	180°F		MX 72-46	
Group VI	ZL-22A Zyglo Penetrant	205°F	4.1CS@ 72°F	MAA 67-48	
	ZE-3 Zyglo Emulsifier	315°F	118.0CS	"	
	ZP-4 Zyglo Developer (dry)			"	
	ZP-5 Zyglo Developer (wet)			"	
	ZP-9 Formula B Zyglo Developer (non-aqueous)	180°F		"	
Group VII	ZL-22A Zyglo Penetrant	205°F	4.1CS@72°F	MAA 69-31	
	ZC-7 Formula B Cleaner	None		MX 72-44	
	ZP-9 Formula B Developer (non-aqueous)	None		MX 72-46	
Group I	VF-31 Visible Penetrant	150°F	2.4CS	MAA 63-48	Met-L-Chek Company 1639 Euclid Street Santa Monica, California 90404 PLANTS: P.O. Box 5427 Englewood, Calif. 90310
	E-59 Remover	142°F		"	
	D-70 Developer (non-aqueous)	50°F		"	
	D-72 Developer (dry)			MAA 65-61	
	D-78 Developer (wet)			"	
Group IA	VF-301NF Penetrant	245°F	3.8CS	MAA 68-83	
	R-501NF Remover			"	
	D-701NF Developer			"	

[illegible] DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
[illegible] II	VP-31 Visible Penetrant E-30 Emulsifier Remover D-70 Developer (non-aqueous) D-72 Developer (dry) D-78 Developer (wet)	150°F 140°F 50°F	2.4CS 1.8CS	MAA 63-49 " " MAA 65-61 "	Met-L-Chek Company 1639 Euclid Street Santa Monica, California 90404 PLANTS: P.O. Box 5427 Englewood, California 90310
[illegible] III	VP-30 Visible Penetrant D-70 Developer (non-aqueous) D-72 Developer (dry) D-78 Developer (wet)	144°F 50°F	1.4CS	ASRCE 61-25 " MAA 65-61 "	
[illegible] IV	FP-90 Penetrant D-70 Developer (non-aqueous) D-72 Developer (dry) D-78 Developer (wet)	Over 200°F 50°F	4.1CS	ASRCE 61-64 " " "	
[illegible] V	FP-93 Penetrant E-56 Emulsifier D-70 Developer (non-aqueous) D-72 Developer (dry) D-78 Developer (wet)	186°F 135°F 50°F	2.5CS 25.7CS	MAA 65-66 " " " "	
[illegible] VI	FP-95 Penetrant E-56 Emulsifier D-70 Developer (non-aqueous) D-72 Developer (dry) D-78 Developer (wet)	250°F 136°F 50°F	8.9CS 25.7CS	MAA 65-65 " " " "	
[illegible] VII	FP-95 Penetrant E-59 Remover D-70 Developer (non-aqueous)	250°F 140°F 50°F	8.9CS	MAA 66-7 " "	

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
Group IV	ZX401 Fluorescent Penetrant Wet Developer (aqueous)	220°F	8.1CS	LA 71-3	Poly Chem Inc. P.O. Box 10026 New Orleans, La. 70121
Group III	P-3 Visible Dye Penetrant D-1 Developer (non-aqueous)	240°F 79°F	2.9CS	MAA 68-35 "	Prospect Chemical Corp. P.O.Box 25495 Los Angeles, Calif.90025
Group IV	NR P5F-4 Penetrant NR P5F-D1 Dry Developer NR P5F-WQ-1 Non-Aqueous Developer	None 85°F	22.5CS	LA 71-77 " LA 72-39	Rockwell International Inc. International Airport, Los Angeles, Calif. 90009
Group I	Dubl-Chek DP-40 Penetrant Dubl-Chek DR-60 Remover Dubl-Chek D-100 Developer	160°F 102°F 50°F	4.8CS 1.45CS	MAA 64-33 " "	Sherwin Inc. 5097 E. Washington Blvd. Los Angeles, Calif. 90040
Group IA	Dubl-Chek DP-40 Penetrant Dubl-Chek DR-61 Remover Dubl-Chek D-100-WF Developer (non-aqueous)	160°F None	4.8CS	MAA 69-4 " "	
Group II	Dubl-Chek DP-40 Penetrant Dubl-Chek ER-70 Emulsifier Dubl-Chek D-100 Developer (non-aqueous) Dubl-Chek D-90 Developer (dry) Dubl-Chek D-110 Developer (wet)	160°F 230°F 50°F	4.8CS 3.2CS	MAA 66-42 " " " "	
Group III	Dubl-Chek DP-50 Penetrant Dubl-Chek D-100 Developer (non-aqueous) Dubl-Chek D-90 Developer (dry) Dubl-Chek D-110 Developer (wet)	160°F 50°F	3.8CS	MAA 66-43 " " "	

COMPONENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP IV	Dubl-Chek HM-2 Penetrant	235°F	6.1CS	MX 73-22	Sherwin Inc. 5007 E. Washington Blvd. Los Angeles, Calif 90040
	Dubl-Chek D-90 Developer (dry)			MAA 65-39	
	Dubl-Chek D-100 Developer (non-aqueous)	50°F		"	
	Dubl-Chek D-110 Developer (wet)			"	
GROUP V	Dubl-Chek FP-20 Penetrant	185°F	2.8CS	MAA 65-45	
	Dubl-Chek ER-60 Emulsifier	230°F	11.7CS	"	
	Dubl-Chek D-90 Developer (dry)			"	
	Dubl-Chek D-100 Developer (non-aqueous)	50°F		"	
	Dubl-Chek D-110 Developer (wet)			"	
GROUP VI	Dubl-Chek FP-30 Penetrant	195°F	4.3CS	MAA 66-44	
	Dubl-Chek ER-80 Emulsifier	230°F	21.7CS	"	
	Dubl-Chek D-90 Developer (dry)			"	
	Dubl-Chek D-110 Developer (wet)			"	
	Dubl-Chek D-100 Developer (non-aqueous)	50°F		"	
GROUP VII	Dubl-Chek FP-30 Penetrant	195°F	4.3CS	MAA 68-4	
	Dubl-Chek ER-60 Remover	102°F		"	
	Dubl-Chek D-100 Developer (non-aqueous)	50°F		"	
GROUP IV	Insta-Viz FSF-4 Penetrant	None	22.5CS	IA 71-77	Tek Tran P.O. Box 469 Newark, Ohio 43055
	Insta-Viz FSF-D1 Dry Developer			"	
	Insta-Viz FSF-27-1 Non Aqueous Developer	85°F		IA 72-39	

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
TYPE I	Flaw Finder DD60B Dye Penetrant	178°F	1.8CS	LA 72-8	Testing Systems, Inc. 2832 Mt. Carmel Ave. Glenside, Pa. 19038
	Flaw Finder SD80B Cleaner	125°F		"	
	Flaw Finder AD70B Developer (non-aqueous)	100°F		"	
TYPE IA	Flaw Finder DD60A Penetrant	190°F	2.3CS@77°F	MAA 65-7	
	Flaw Finder SD80 Cleaner	None		"	
	Flaw Finder SD80S Cleaner	145°F		"	
	Flaw Finder AD70 Developer (non-aqueous)	None		"	
	Flaw Finder AD-5 Wet Developer			"	
	Flaw Finder AD-4 Dry Developer			"	
TYPE II	Flaw Finder DD60A Penetrant	190°F	2.3CS@77°F	MAA 68-9	
	Flaw Finder SD-90 Emulsifier	190°F	2.8CS@77°F	"	
	Flaw Finder AD-70 Developer (non-aqueous)	None		"	
	Flaw Finder AD-5 Wet Developer			"	
	Flaw Finder AD-4 Dry Developer			"	
TYPE III	Flaw Finder DD60M Penetrant	215°F	3.2CS@77°F	MAA 68-8	
	Flaw Finder AD-70 Developer	None		"	
	Flaw Finder AD-5 Wet Developer			"	
	Flaw Finder AD-4 Dry Developer			"	
TYPE IV	Fluoro Finder FL-17 Penetrant	175°F	2.2CS	MAA 67-35	
	Fluoro Finder FD-33 Developer (non-aqueous)	None		"	
	Fluoro Finder FD-4 Dry Developer			"	
	Fluoro Finder FD-5 Wet Developer			"	

EQUIPMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
Group V	Fluoro Finder FL-2 Penetrant	185°F	1.7CS	MAA 67-36	Testing Systems, Inc. 2832 Mt. Carmel Ave. Glenside, Pa. 19038
	Fluoro Finder Emulsifier FE-5	155°F	5.18CS	"	
	Fluoro Finder FD-33 (non-aqueous) Developer	None		"	
	Fluoro Finder FD-5 Wet Developer			"	
	Fluoro Finder FD-4 Dry Developer			"	
Group VI	Fluoro Finder FL-22 Penetrant	175°F	2.7CS	MAA 67-37	
	Fluoro Finder Emulsifier FE-5	155°F	2.CS	"	
	Fluoro Finder FD-33 (non-aqueous) Developer	None		"	
	Fluoro Finder FD-5 Wet Developer			"	
	Fluoro Finder FD-4 Dry Developer			"	
Group VII	Fluoro Finder FL-22 Penetrant	175°F	2.7CS	MAA 67-38	
	Fluoro Finder FC-44 Cleaner	None		"	
	Fluoro Finder FD-33 Developer	None		"	
Group I	PT Penetrant (Visible)	125°F	1.38CS	LA 71-83	Tokushu Toryo Company Ltd. 17 Nishi 4 Chome Omori, Ota-Ku Tokyo, Japan
	RT Remover	85°F		"	
	DT Developer (non-aqueous) wet			"	
Group IV	CD-1800 Penetrant	215°F	5.3CS	LA 71-4	
	DN-600P Developer (dry)				
	DN-600S Developer (non-aqueous)	90°F			
	DK-900D Developer (wet)				

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP V	OD-1700A Penetrant OD-1700B Emulsifier	225°F 240°F	9.1CS 103.7CS	LA 71-5	Tokushu Toryo Company Ltd. 17 Nishi 4 Chome Omori, Ohta-Ku Tokyo, Japan
GROUP V	DN-600P Developer (dry) DN-600S Developer (non-aqueous)	90°F		LA 71-5 "	
GROUP VI	OD-6000 Penetrant OD-1700B Emulsifier DN-600P Developer (dry) DN-600S Developer (non-aqueous) DN-900D Developer (wet)	230°F 240°F 90°F	10.8CS 103.7CS	LA 71-6 " " "	
GROUP I	Dy-Chek # 2 Penetrant Dy-Chek Remover # 3 Dy-Chek NAD Developer (non-aqueous) wet Dy-Chek DD-3 Developer (dry) Dy-Chek WD Developer (wet)	225°F 140°F 43°F	2.29CS	MX 73-13 ASRCE 61-76 " " MAA 63-46	Turco Products Div. Purex Corporation Ltd. Wilmington, Calif.90744 PLANTS: Wilmington, California Rockdale, Joliet, Illinois Houston, Texas Philadelphia, Pa.
GROUP IA	Dy-Chek Penetrant Dy-Chek Pre-Chek Remover Dy-Chek Developer HF	140°F None None	2.3CS	ASRCE 61-76 MAA 68-5 MAA 69-25	
GROUP II	Dy-Chek # 2 Penetrant Dy-Chek LS Remover Dy-Chek NAD Developer (non-aqueous) wet Dy-Chek DD-3 Developer (dry) Dy-Chek WD Developer (wet)	225°F 178°F 43°F	2.29CS 1.55CS	MX 73-14 LA 72-11 ASRCE 61-77 ASRCE 61-76 MAA 63-46	

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP III	Dy-Chek Penetrant WW-1 Dy-Chek Developer (non-aqueous) Dy-Chek DD-3 Developer (dry) Dy-Chek Developer (wet)	140°F 43°F	4.5CS	MAA 66-26 " " "	Turco Products Div. Purex Corporation Ltd. 24600 S. Main Street Wilmington, Calif. 90744 PLANTS: Wilmington, California Rockdale, Joliet, Illinois Houston, Texas Philadelphia, Pa.
GROUP IV	Fluro-Chek WP-1 Penetrant Fluro-Chek NAD Developer Fluro-Chek DD2 Developer (dry) Fluro-Chek WD Developer (wet)	Over 196°F 43°F	5.2CS	MAA 63-38 " MAA 67-9 "	
GROUP V	Fluro-Chek P-21 Penetrant Fluro-Chek E Emulsifier Fluro-Chek NAD Developer Fluro-Chek WD Developer (wet) Fluro-Chek DD2 Developer (dry)	218°F 235°F 43°F	7.5CS 10.5CS	MAA 64-2 " " " MAA 67-9	
GROUP VI	Fluro-Chek P-40 Penetrant Fluro-Chek E Emulsifier Fluro-Chek NAD Developer Fluro-Chek DD2 Developer (dry) Fluro-Chek WD Developer (wet)	210°F 235°F 43°F	7.5CS 10.5CS	MAA 65-43 " " MAA 67-9 "	
GROUP VII	Fluro-Chek P-40 Penetrant Fluro-Chek K Remover Fluro-Chek NAD Developer	210°F 140°F 43°F	7.5CS	MAA 65-42 " "	
GROUP I	P-300A Penetrant K-410E Remover D-495 Developer	305°F 125°F 67°F	17.0CS 1.0JCS	MX 73-39 " "	Uresco Inc. 12412 Benedict Ave. Downey, Calif. 90242

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP IA	P-300A Penetrant	225°F	2.2CS	MX 73-44	Uresco Inc.
	E-410C Remover	None	0.57CS	MX 73-44	12412 Benedict Ave.
	D-495C Non-Aqueous Developer	None		MX 73-44	Downey, Calif. 9024.
	D-492C Wet Developer			MAA 67-4	
	D-493A Dry Developer			MAA 63-67	
GROUP II	P-300A Penetrant D-Format	305°F	17.0CS	MX 73-45	
	E-342 Emulsifier Cleaner	170°F	1.6CS	MX 73-45	
	D-495C Non-Aqueous Developer	None		MX 73-45	
	D-492C Wet Developer			MAA 63-67	
	D-493A Dry Developer				
GROUP III	P-301A Penetrant	255°F	34.3CS	MX 73-40	
	D-495C Non-Aqueous Developer	None		MX 73-40	
GROUP IV	P-131 Penetrant			MX 73-39	
	D-495C Non-Aqueous Developer	None		"	
	D-492C Wet Developer			MAA 67-4	
	D-493A Dry Developer			MAA 63-67	
GROUP V	P-148B Penetrant	245°F	3.1CS	MX 73-41	
	E-153 Emulsifier	242°F	51.3CS	ASRC 69-39	
	D-495C Non-Aqueous Developer	None		MX 73-41	
	D-492C Wet Developer			MAA 67-4	
	D-493A Dry Developer			MAA 63-67	
GROUP VI	P-149A Penetrant	245°F	3.4CS	MX 73-42	
	E-153 Emulsifier	242°F	51.3CS	"	
	D-495C Non-Aqueous Wet Developer	None		MX 73-42	
	D-492C Wet Developer			MAA 67-4	
	D-493A Dry Developer			MAA 63-67	

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION	FLASH POINT °F	VISCOSITY	TEST OR QUALIFICATION REFERENCE	MANUFACTURER'S NAME AND ADDRESS
GROUP VII	P-149 Penetrant	240°F	5.3CS	MAA 64-49	Uresco Inc.,
	K-410C Remover	None.	0.57CS	MX 73-44	12412 Benedict Ave.
	D-495C Non-Aqueous Developer	None		"	Downey, Calif. 90242