

**Approval**

See approval labels for approved maximum use concentration and for specific limitations.

**Limitations**

Not for use in atmospheres immediately dangerous to life or health.

Not for use in atmospheres containing less than 19.5 percent oxygen.

In making renewals and repairs, parts identical with those furnished by the manufacturer under the pertinent approval shall be maintained.

Refer to approval label and instruction and maintenance manuals for additional information on use and maintenance of these respirators.

Follow the manufacturer's instructions for changing cartridges or for discarding disposable respirators.

Approval may include protection against particulates or other gases and vapors. The type of additional approval is listed in the last two columns. See page 10 for definitions of particulate types and approved use concentrations on gases and vapors.

This respirator shall be carefully fitted to the wearer's face before use, in accordance with the manufacturer's facepiece fitting instructions.

This respirator shall be selected, fitted, used and maintained in accordance with Mine Safety and Health Administration and other applicable regulations.

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - HYDROGEN FLUORIDE

Approval Number TC-23C-	Approval Issued to	Respirator and Facepiece Type	Number of Approvals Cartridges	Other and DFM	Gas Vapor
76	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/H2S
77	Willson	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl/ ClO2/H2S
141	Willson	Rp,Fm,FF	2		OV/SO2/ Cl/HCl/ ClO2/H2S
142	Willson	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl/ ClO2/H2S
446	3M	Rp,Fm,ON	2		OV/SO2 Cl/HCl
447	3M	Rp,Fm,ON	2	DM	OV/SO2 Cl/HCl
448	3M	Rp,Fm,ON	2	HRA	OV/SO2 Cl/HCl
563	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/H2S
565	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/H2S
577	Willson	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl/ ClO2/H2S
583	Willson	Rp,Fm,ON	2	HA	OV/SO2/ Cl/HCl/ H2S

685	3M	Rp,Fm,FF	2		Cl/HCl SO2/OV
690	3M	Rp,Fm,FF	2	DM	SO2/Cl HCl/OV
695	3M	Rp,Fm,FF	2	HRA	SO2/HCl Cl/OV
699	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S CH2-O
700	Willson	Rp,Fm,FF	2		SO2/ Cl/HCl/ H2S/CH2-O
701	Willson	Rp,Fm,ON	2		SO2/ Cl/HCl/ H2S/CH2-O
705	Willson	Rp,Fm,ON	2	DM	SO2/ Cl/HCl/ H2S/CH2-O
706	Willson	Rp,Fm,ON	2	DM	SO2/ Cl/HCl/ H2S/CH2-O
707	Willson	Rp,Fm,FF	2	DM	SO2/ Cl/HCl/ H2S/CH2-O
711	Willson	Rp,Fm,ON	2	DFMR	SO2/ Cl/HCl/ H2S/CH2-O
712	Willson	Rp,Fm,FF	2	DFMR	SO2/ Cl/HCl/ H2S/CH2-O
713	Willson	Rp,Fm,FF	2	DFMR	SO2/ Cl/HCl/ H2S/CH2-O

717	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ Cl/HCl/ ClO2/H2S
718	Willson	Rp,Fm,FF	2	DFMR	OV/SO2/ Cl/HCl/ ClO2/H2S
719	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ Cl/HCl/ ClO2/H2S
865	3M	Su,ON	2		OV/SO2/ Cl/HCl
868	3M	Su,ON	2	DM	OV/SO2/ Cl/HCl
878	3M	Rp,Fm,FF	2		OV/SO2 Cl/HCl
883	3M	Rp,Fm,FF	2	DM	OV/SO2 Cl/HCl
888	3M	Rp,Fm,FF	2	HRA	OV/SO2 Cl/HCl
972	North	Su,ON	1	DM	
1010	3M	Su,ON	2	HRA	OV/SO2/ Cl/HCl
1064	3M	Rp,Fm,ON	2		OV/SO2/ Cl/HCl
1069	3M	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl
1074	3M	Rp,Fm,ON	2	HRA	OV/SO2/ Cl/HCl
1114	Racal	PAPR,HH	3	HRA	SO2/OV

1115	Racal	PAPR,HH	3	HRA	SO2/OV
1116	3M	Rp,Fm,ON	2	DM	
1117	3M	Rp,Fm,FF	2	DM	
1118	3M	Rp,Fm,ON	2	DM	
1119	3M	Rp,Fm,FF	2	DM	
1140	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/H2S
1147	Willson	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl/ ClO2/H2S
1152	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ Cl/HCl/ ClO2/H2S
1207	Racal	PAPR,FF	3	HRA	OV/SO2
1208	Racal	PAPR,HH	3	HRA	OV/SO2
1209	Racal	PAPR,HH	3	HRA	OV/SO2
1210	Racal	PAPR,ON	3	HRA	OV/SO2
1211	Racal	PAPR,HH	3	HRA	OV/SO2
1212	Racal	PAPR,HH	3	HRA	OV/SO2
1224	Moldex	Rp,Fm,Su,ON	2		SO2/Cl/ HCl/ClO2/ H2S
1225	Moldex	Rp,Fm,Su,ON	2		OV/SO2/Cl/ HCl/ClO2/

1322	3M	Su,ON	2	DM	OV/SO2/ HCl/Cl
1323	3M	Rp,Fm,ON	2	DM	OV/SO2/ HCl/Cl
1332	3M	Su,ON	2	HR	OV/SO2/ HCl/Cl
NOT APPROVED FOR RADIONUCLIDES					
1333	3M	Rp,Fm,ON	2	HR	OV/SO2/ HCl/Cl
NOT APPROVED FOR RADIONUCLIDES					
1339	Moldex	Rp,Fm,ON	2	DM	ClO2/H2S/ SO2/Cl/HCl
1342	Moldex	Rp,Fm,ON	2	DM	ClO2/H2S/ SO2/Cl/HCl
1343	Moldex	Rp,Fm,ON	2	DM	ClO2/OV/ SO2/Cl/HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - MERCURY

Approval Number TC-23C-	Approval Issued to	Respirator and Facepiece Type	Number of Approvals Cartridges	Other and DFM	Gas Vapor
629	MSA	Rp,Bm,ON	2		Cl
916	Glendale	Rp,Bm,ON	2		Cl
1031	Cabot Safety	Rp,Bm,ON	2		Cl
1032	Cabot Safety	Rp,Bm,FF	2		Cl
1046	MSA	Rp,Bm,ON	2	HA	Cl
1348	MSA	Rp,Bm,FF	2	HA	Cl
1349	MSA	Rp,Bm,ON	2	HA	Cl
1354	MSA	Rp,Bm,FF	2		Cl
1355	MSA	Rp,Bm,FF	2	HA	Cl
1356	Willson	Rp,Bm,ON	2		Cl
1357	Willson	Rp,Bm,FF	2		Cl
1364	MSA	PAPR,ON	2	HRA	Cl
1365	MSA	PAPR,FF	2	HRA	Cl
1384	Cabot Safety	Rp,Fm,FF	2		Cl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - HYDROGEN SULFIDE (escape only)

Approval Number TC-23C-	Approval Issued to	Respirator and Facepiece Type	Number of Approvals Cartridges	Other and DFM	Gas Vapor
41	MSA	Rp,Fm,ON	2	DM	SO <sub>2</sub> /Cl HCl/ClO <sub>2</sub>
47	MSA	Rp,Fm,Bm,ON	2	DM	OV/HCL/Cl ClO <sub>2</sub> /SO <sub>2</sub>
76	Willson	Rp,Fm,ON	2		OV/SO <sub>2</sub> / Cl/HCl/ ClO <sub>2</sub> /HF
77	Willson	Rp,Fm,ON	2	DM	OV/SO <sub>2</sub> / Cl/HCl/ ClO <sub>2</sub> /HF
115	Scott	Rp,Fm,ON	2		HCL/Cl ClO <sub>2</sub> /SO <sub>2</sub> CH <sub>2</sub> -O
REPLACED BY TC-23C-768					
116	Scott	Rp,Fm,ON	2	DM	HCL/Cl ClO <sub>2</sub> /SO <sub>2</sub> CH <sub>2</sub> -O
141	Willson	Rp,Fm,ON	2		OV/SO <sub>2</sub> / Cl/HCl/ ClO <sub>2</sub> /HF
142	Willson	Rp,Fm,ON	2	DM	OV/SO <sub>2</sub> / Cl/HCl/ ClO <sub>2</sub> /HF
145	MSA	Rp,Fm,ON	2	DM	SO <sub>2</sub> /Cl HCl/ClO <sub>2</sub>
146	MSA	Rp,Fm,FF	2	DM	OV/HCL/Cl ClO <sub>2</sub> /SO <sub>2</sub>
150	MSA	Rp,Fm,FF	2	HA	SO <sub>2</sub> /Cl HCl/ClO <sub>2</sub>



153	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI ClO2/SO2 Pest
154	MSA	Rp,Fm,FF	2	DFMR	OV/HCL/CI ClO2/SO2 Pest
156	MSA	Rp,Fm,ON	2	HA	HCL/CI ClO2/SO2
159	MSA	Rp,Fm,Bm,ON	2	HA	OV/HCL/CI ClO2/SO2 Pest
160	MSA	Rp,Fm,Bm,ON	2	DFMR	OV/HCL/CI ClO2/SO2 Pest
172	Scott	Rp,Fm,ON	2		OV/HCL/CI ClO2/SO2 CH2-O
REPLACED BY TC-23C-776					
174	Scott	Rp,Fm,ON	2	DM	OV/HCL/CI ClO2/SO2 CH2-O
218	Scott	Rp,Fm,FF	2	DM	HCL/CI ClO2/SO2 CH2-O
221	Scott	Rp,Fm,FF	2		OV/HCL/CI ClO2/SO2 CH2-O
222	Scott	Rp,Fm,FF	2	DM	OV/HCL CI/ClO2 SO2/CH2-O
225	Scott	Rp,Fm,FF	2		HCL/CI ClO2/SO2 CH2-O
246	Scott	Rp,Fm,ON	2	DFMR	HCL/CI ClO2/SO2

247	Scott	Rp,Fm,FF	2	DFMR	HCl/Cl ClO2/SO2 CH2-O
250	Scott	Rp,Fm,ON	2	DFMR	OV/HCL/Cl ClO2/SO2 CH2-O
251	Scott	Rp,Fm,FF	2	DFMR	OV/HCL/Cl ClO2/SO2 CH2-O
260	MSA	Rp,Fm,ON	2	DM	OV/HCL/Cl ClO2/SO2
261	MSA	Rp,Bm,ON	2	DM	OV/HCL/Cl ClO2/SO2
262	MSA	Rp,Bm,FF	2	DM	OV/HCL/Cl ClO2/SO2
288	North	Es,Mp	1		SO2/Cl HCl
298	Willson	Rp,Fm,ON	2		OV/HCL/Cl ClO2/SO2
299	Willson	Rp,Fm,ON	2	HA	OV/HCL/Cl ClO2/SO2
300	Willson	Rp,Fm,FF	2		OV/HCL/Cl ClO2/SO2
301	Willson	Rp,Fm,FF	2		OV/HCL/Cl ClO2/SO2
339	Cabot Safety	Rp,Fm,ON	2		HCl/Cl ClO2/SO2
340	Cabot Safety	Rp,Fm,FF	2		HCl/Cl ClO2/SO2

341	Cabot Safety	Rp,Fm,ON	2	D,M	HCl/Cl ClO2/SO2
342	Cabot Safety	Rp,Fm,FF	2	D,M	HCl/Cl ClO2/SO2
415	Cabot Safety	Rp,Fm,ON	2	HRA	HCl/Cl ClO2/SO2
416	Cabot Safety	Rp,Fm,FF	2	HRA	HCl/Cl ClO2/SO2
443	3M	Rp,Fm,ON	2		SO2/HCl/Cl ClO2
444	3M	Rp,Fm,ON	2	DM	SO2/HCl/Cl ClO2
445	3M	Rp,Fm,ON	2	HRA	SO2/HCl/Cl ClO2
449	North	Es,Mp	1	DM	SO2/Cl HCl
461	MSA	Rp,Bm,ON	2	DM	HCl/Cl ClO2/SO2
462	MSA	Rp,Bm,ON	2	DM	OV/HCl/Cl ClO2/SO2
466	MSA	Rp,Bm,ON	2	HA	OV/HCl/Cl ClO2/SO2 Pest
467	MSA	Rp,Bm,ON	2	DFMR	OV/HCl/Cl ClO2/SO2 Pest
470	MSA	Rp,Bm,ON	2	HA	HCl/Cl ClO2/SO2
472	MSA	Rp,Bm,ON	2	DM	OV/HCl/Cl ClO2/SO2

492	Scott	Es,Mp	1		Cl/HCl
514	MSA	Es,Mp	1	DM	SO2/HCl/Cl ClO2
517	Scott	Rp,Fm,ON	2	HRA	HCl/Cl ClO2/SO2 CH2-O
REPLACED BY TC-23C-771					
518	Scott	Rp,Fm,FF	2	HRA	HCl/Cl ClO2/SO2 CH2-O
521	Scott	Rp,Fm,ON	2	HRA	OV/HCl/Cl ClO2/SO2 CH2-O
REPLACED BY TC-23C-779					
522	Scott	Rp,Fm,FF	2	HRA	OV/HCl Cl/ClO2 SO2/CH2-O
563	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/HF
565	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/HF
577	Willson	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl/ ClO2/HF
583	Willson	Rp,Fm,ON	2	HA	OV/SO2/ Cl/HCl/ ClO2
604	Cabot Safety	Es,Mp	1		Cl/ClO2
684	3M	Rp,Fm,FF	2		SO2/HCl/Cl ClO2

689	3M	Rp,Fm,FF	2	DM	SO2/HCL/CI ClO2
694	3M	Rp,Fm,FF	2	HRA	SO2/HCL/CI ClO2
699	Willson	Rp,Fm,ON	2		SO2/CI/ HCl/CH2-O
700	Willson	Rp,Fm,FF	2		SO2/CI/ HCl/CH2-O
701	Willson	Rp,Fm,ON	2		SO2/CI/ HCl/CH2-O
705	Willson	Rp,Fm,ON	2	DM	SO2/CI/ HCl/CH2-O
706	Willson	Rp,Fm,ON	2	DM	SO2/CI/ HCl/CH2-O
707	Willson	Rp,Fm,FF	2	DM	SO2/CI/ HCl/CH2-O
711	Willson	Rp,Fm,ON	2	DFMR	SO2/CI/ HCl/CH2-O
712	Willson	Rp,Fm,FF	2	DFMR	SO2/CI/ HCl/CH2-O
713	Willson	Rp,Fm,ON	2	DFMR	SO2/CI/ HCl/CH2-O
717	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCl/ ClO2/HF
718	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCl/ ClO2/HF
719	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCl/ ClO2/HF

768	Scott	Rp,Fm,ON	2		HCL/CI ClO2/SO2 CH2-O
769	Scott	Rp,Fm,ON	2	DM	HCL/CI ClO2/SO2 CH2-O
770	Scott	Rp,Fm,ON	2	DMFR	HCL/CI ClO2/SO2 CH2-O
771	Scott	Rp,Fm,ON	2	HRA	HCL/CI ClO2/SO2 CH2-O
776	Scott	Rp,Fm,ON	2		OV/HCL/CI ClO2/SO2
777	Scott	Rp,Fm,ON	2	DM	OV/HCL/CI ClO2/SO2 CH2-O
778	Scott	Rp,Fm,ON	2	DMFR	OV/HCL/CI ClO2/SO2
779	Scott	Rp,Fm,ON	2	HRA	OV/HCL/CI ClO2/SO2
832	MSA	Rp,Fm,FF	2	DM	HCL/CI ClO2/SO2
833	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI ClO2/SO2
836	MSA	Rp,Fm,FF	2	HA	HCL/CI ClO2/SO2
837	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI ClO2/SO2
839	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI ClO2/SO2 Pest

843	MSA	Rp,Fm,FF	2	DM	HCL/CI CIO2/SO2
844	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
851	MSA	Rp,Fm,FF	2	HA	HCL/CI CIO2/SO2
852	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
853	MSA	Rp,Fm,FF	2	DFMR	OV/HCL/CI CIO2/SO2 Pest
854	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI CIO2/SO2 Pest
866	3M	Su,ON	2		SO2/CI HCl/CIO2
869	3M	Su,ON	2	DM	SO2/CI HCl/CIO2
877	3M	Rp,Fm,FF	2		CIO2 SO2/HCL/CI
882	3M	Rp,Fm,FF	2	DM CIO2	SO2/HCL/CI
887	3M	Rp,Fm,FF	2	HRA CIO2	SO2/HCL/CI
929	MSA	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/CI CIO2/SO2 Pest
930	MSA	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/CI CIO2/SO2 Pest

931	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
932	MSA	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
933	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
934	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
946	MSA	Rp,Fm,FF	2	DM	HCl/Cl ClO2/SO2
947	MSA	Rp,Fm,FF	2	DM	OV/HCl/Cl ClO2/SO2
951	MSA	Rp,Fm,FF	2	HA	HCl/Cl ClO2/SO2
952	MSA	Rp,Fm,FF	2	HA	OV/HCl/Cl ClO2/SO2 Pest
953	MSA	Rp,Fm,FF	2	DFMR	OV/HCl/Cl ClO2/SO2 Pest
957	MSA	Rp,Fm,FF	2	DM	OV/HCl/Cl ClO2/SO2
961	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
981	Cabot Safety	Rp,Fm,FF	2		SO2/Cl HCl/ClO2
982	Cabot Safety	Rp,Fm,FF	2	DM	SO2/Cl HCl/ClO2



983	Cabot Safety	Rp,Fm,FF	2	DFM	SO2/Cl HCl/ClO2
1000	Cabot Safety	Rp,Fm,FF	2	HRA	SO2/Cl HCl/ClO2
1020	3M	Su,ON	2	HRA	SO2/Cl HCl/ClO2
1061	Scott	Es,Mp	1		ClO-2/Cl HCl/SO2
1063	3M	Rp,Fm,ON	2		SO2/Cl HCl/ClO2
1068	3M	Rp,Fm,ON	2	DM	SO2/Cl HCl/ClO2
1073	3M	Rp,Fm,ON	2	HRA	SO2/Cl HCl/ClO2
1077	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/ClO2
1078	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/ClO2
1085	MSA	Rp,Fm,FF	2	HA	Cl/HCl SO2/ClO2
1086	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/ClO2 OV
1087	MSA	Rp,Fm,FF	2	DFMR	Cl/HCl SO2/ClO2 OV/Pest
1088	MSA	Rp,Fm,FF	2	HA	Cl/HCl SO2/ClO2 OV/Pest

1093	MSA	Rp,Fm,FF	2	HA	Cl/HCl SO2/ClO2 OV/Pest
NOT APPROVED FOR RADIONUCLIDES					
1140	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ ClO2/HF
1141	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/CH2-O
1144	Willson	Rp,Fm,ON	2		OV/SO2/Cl/ HCl/ClO2
1147	Willson	Rp,Fm,ON	2	DM	OV/SO2/Cl/ HCl/ClO2/ HF
1148	Willson	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/CH2-O
1152	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ Cl/HCl/ ClO2/HF
1153	Willson	Rp,Fm,ON	2	DFMR	SO2/Cl/ HCl/CH2-O
1156	Willson	Rp,Fm,ON	2	HA	OV/SO2/Cl/ HCl/ClO2
1158	MSA	Rp,Fm,FF	2	DM	SO2/Cl/ HCl/ClO2
1159	MSA	Rp,Fm,FF	2	DM	OV/SO2/ HCl/ClO2
1163	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/ClO2
1164	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/ClO2/ OV/Pest

1165	MSA	Rp,Fm,FF	2	DFMR	OV/SO2/Cl/ HCl/ClO2/ Pest
1169	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/ClO2
1172	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/SO2/Cl/ HCl/ClO2/ Pest
1177	MSA DE CHILI	Rp,Fm,ON	2		SO2/Cl/ HCl/ClO2
1178	MSA DE CHILI	Rp,Fm,ON	2		OV/SO2/Cl/ HCl/ClO2
1179	MSA DE CHILI	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/ClO2
1180	MSA DE CHILI	Rp,Fm,ON	2	DFMR	OV/SO2/Cl/ HCl/ClO2
1190	MSA	Rp,Fm,FF	2	DM	SO2/Cl/ HCl/ClO2
1191	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/ClO2
1195	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/ClO2
1196	MSA	Rp,Fm,FF	2	HA	OV/SO2/Cl/ HCl/ClO2/ Pest
1197	MSA	Rp,Fm,FF	2	DFMR	OV/SO2/Cl/ HCl/ClO2/ Pest
1201	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/ClO2

1204	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/SO2/Cl/ HCl/ClO2/ Pest
1217	Scott	Mp,Es	1	DM	SO2/Cl/ HCl/ClO2
1224	Moldex	Rp,Fm,Su,ON	2		SO2/Cl/ HCl/HF/ ClO2
1231	Cabot Safety	Rp,Fm,ON	2		SO2/Cl/ HCl/ClO2
1232	Cabot Safety	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/ClO2
1233	Cabot Safety	Rp,Fm,ON	2	DFMR	SO2/Cl/ HCl/ClO2
1234	Cabot Safety	Rp,Fm,ON	2	HRA	SO2/Cl/ HCl/ClO2
1272	Survivair	Su,ON	2	DM	SO2/Cl/ HCl/ClO2/ OV
1275	Survivair	Su,ON	2	DFM	SO2/Cl/ HCl/ClO2/ OV
1277	MSA	Rp,Fm,ON	2		SO2/Cl/ HCl/ClO2
1278	MSA	Rp,Fm,ON	2		SO2/Cl/ HCl/ClO2/ OV
1281	MSA	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/ClO2/
1282	MSA	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	SO2/Cl/ HCl/ClO2/ OV

1282	Critical Services	Su,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	SO2/Cl/ HCl/ClO2/ OV/Pest
1283	MSA	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/ClO2/ OV
1312	MSA	PAPR,ON	2		Cl/SO2/ HCl/ClO2
1313	MSA	PAPR,ON	2	HA	Cl/SO2/ HCl/ClO2
1314	MSA	PAPR,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	Cl/SO2/ HCl/ClO2
1315	MSA	PAPR,FF	2		Cl/SO2 HCl/ClO2
1316	MSA	PAPR,FF	2	HA	Cl/SO2/ HCl/ClO2
1317	MSA	PAPR,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	Cl/SO2/ HCl/ClO2
1320	3M	Su,ON	2	DM	Cl/SO2/ HCl/ClO2
1321	3M	Rp,Fm,ON	2	DM	Cl/SO2/ HCl/ClO2
1330	3M	Su,ON NOT APPROVED FOR RADIONUCLIDES	2	HR	SO2/Cl/ HCl/ClO2
1331	3M	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HR	SO2/Cl/ HCl/ClO2
1339	Moldex	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/ClO2/HF

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1342	Moldex	Rp,Fm,ON	2	DM	ClO <sub>2</sub> /HF/ SO <sub>2</sub> /Cl/HCl
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1404	Cabot Safety	Es,Mp	2	DM	SO <sub>2</sub> /Cl/ HCl/ClO <sub>2</sub>
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CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - CHLORINE DIOXIDE

Approval Number TC-23C-	Approval Issued to	Respirator and Facepiece Type	Number of Approvals Cartridges	Other and DFM	Gas Vapor
41	MSA	Rp,Fm,ON	2	DM	H2S/SO2/Cl HCl
47	MSA	Rp,Fm,Bm,ON	2	DM	OV/HCL/Cl SO2/H2S
76	Willson	Rp,Fm,On	2		OV/SO2/ Cl/HCl/ C2S/HF/ H2S
77	Willson	Rp,Fm,On	2	DM	OV/SO2/ Cl/HCl/ C2S/HF/ H2S
115	Scott	Rp,Fm,ON	2		HCL/Cl CH2-O/SO2
REPLACED BY TC-23C-768					
116	Scott	Rp,Fm,ON	2	DM	HCL/Cl CH2-O/SO2
141	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ H2S/HF
142	Willson	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl/ H2S/HF
145	MSA	Rp,Fm,ON	2	DM	H2S/SO2/Cl HCl
146	MSA	Rp,Fm,FF	2	DM	OV/HCL/Cl SO2/H2S
150	MSA	Rp,Fm,FF	2	HA	H2S/SO2/Cl HCl

153	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI SO2/H2S Pest
154	MSA	Rp,Fm,FF	2	DFMR	OV/HCL/CI SO2/H2S Pest
156	MSA	Rp,Fm,ON	2	HA	HCL/CI SO2/H2S
159	MSA	Rp,Fm,FF,ON	2	HA	OV/HCL/CI SO2/H2S Pest
160	MSA	Rp,Fm,FF,ON	2	DFMR	OV/HCL/CI SO2/H2S Pest
172	Scott	Rp,Fm,ON	2		HCL/CI OV/SO2 H2S/CH2-O
REPLACED BY TC-23C-776					
174	Scott	Rp,Fm,ON	2	DM	HCL/CI OV/SO2 H2S/CH2-O
183	Glendale	Rp,Fm,ON	2		SO2/HCL/CI CH2-O
218	Scott	Rp,Fm,FF	2	DM	HCL/CI CH2-O/SO2 H2S
221	Scott	Rp,Fm,FF	2		HCL/CI OV/SO2 H2S/CH2-O
222	Scott	Rp,Fm,FF	2	DM	HCL/CI OV/SO2 H2S/CH2-O
225	Scott	Rp,Fm,FF	2		HCL/CI SO2/CH2-O H2S



246	Scott	Rp,Fm,ON	2	DFMR	HCL/CI SO2/CH2-O H2S
247	Scott	Rp,Fm,FF	2	DFMR	HCL/CI SO2/CH2-O H2S
250	Scott	Rp,Fm,ON	2	DFMR	HCL/CI SO2/CH2-O H2S/OV
251	Scott	Rp,Fm,ON	2	DFMR	HCL/CI SO2/H2S OV/CH2-O
260	MSA	Rp,Fm,ON	2	DM	OV/HCL/CI SO2/H2S
261	MSA	Rp,Fm,ON	2	DM	OV/HCL/CI SO2/H2S
262	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI SO2/H2S
281	Cabot Safety	Rp,Fm,ON	2	DFM	OV/HCL/CI SO2/Pest
282	Cabot Safety	Rp,Fm,FF	2	DFM	OV/HCL/CI SO2/Pest
288	North	Es,Mp	1		SO2/CI/ HCL
298	Willson	Rp,Fm,ON	2		OV/CI HCL/SO2/ H2S/HF
299	Willson	Rp,Fm,ON	2	HA	OV/CI HCL/SO2/ H2S/HF
300	Willson	Rp,Fm,Fr	2		OV/CI HCL/SO2/ H2S/HF

301	Willson	Rp,Fm,Fr	2		OV/CI HCL/SO2/ H2S
318	Survivair	Rp,Fm,ON	2		OV/SO2/ CI/HCL
339	Cabot Safety	Rp,Fm,ON	2		HCL/CI SO2/H2S
340	Cabot Safety	Rp,Fm,FF	2		HCL/CI SO2/H2S
341	Cabot Safety	Rp,Fm,ON	2	DM	SO2/CI HCL/H2S
342	Cabot Safety	Rp,Fm,FF	2	DM	SO2/CI HCL/H2S
343	Cabot Safety	Rp,Fm,ON	2		OV/SO2/HCL CI
344	Cabot Safety	Rp,Fm,FF	2		OV/SO2/HCL CI
345	Cabot Safety	Rp,Fm,ON	2	DM CI	OV/SO2/HCL CI
346	Cabot Safety	Rp,Fm,FF	2	DM CI	OV/SO2/HCL CI
407	Glendale	Rp,Fm,FF	2		SO2/HCL/CI CH2-O
415	Cabot Safety	Rp,Fm,ON	2	HRA	HCL/CI SO2/H2S
416	Cabot Safety	Rp,Fm,FF	2	HRA	HCL/CI SO2/H2S
417	Cabot Safety	Rp,Fm,ON	2	HRA	OV/SO2/HCL CI/Pest

418	Cabot Safety	Rp,Fm,FF	2	HRA	OV/SO2/HCl Cl/Pest
433	Survivair	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl
443	3M	Rp,Fm,ON	2		SO2/HCL/Cl H2S
444	3M	Rp,Fm,ON	2	DM	SO2/HCL/Cl H2S
445	3M	Rp,Fm,ON	2	HRA	SO2/HCL/Cl H2S
449	North	Es,Mp	1	DM	SO2/HCL/Cl
450	Survivair	Rp,Fm,ON	2	HRA	OV/Pest/ SO2/Cl/HCl
461	MSA	Rp,Bm,ON	2	DM	HCL/Cl SO2/H2S
462	MSA	Rp,Bm,ON	2	DM	OV/HCL/Cl SO2/H2S
466	MSA	Rp,Bm,ON	2	HA	OV/HCL/Cl SO2/H2S Pest
467	MSA	Rp,Bm,ON	2	DFMR	OV/HCL/Cl SO2/H2S Pest
470	MSA	Rp,Bm,ON	2	HA	HCL/Cl SO2/H2S
472	MSA	Rp,Bm,ON	2	DM	OV/HCL/Cl SO2/H2S
514	MSA	Es,Mp	1	DM	SO2/HCl/Cl

517	Scott	Rp,Fm,ON	2	HRA	SO2/HCl Cl/H2S CH2-O
REPLACED BY TC-23C-771					
518	Scott	Rp,Fm,FF	2	HRA	SO2/HCl Cl/H2S CH2-O
521	Scott	Rp,Fm,ON	2	HRA	OV/SO2 HCl/Cl H2S/CH2-O
REPLACED BY TC-23C-779					
522	Scott	Rp,Fm,FF	2	HRA	OV/SO2 HCl/Cl H2S/CH2-O
532	Survivair	Rp,Fm,ON	2	DFMR	OV/SO2/ Cl/HCl
563	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ H2S/HF
565	Willson	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/ HF/H2S
577	Willson	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl/ H2S/HF
583	Willson	Rp,Fm,ON	2	HA	OV/SO2/ Cl/HCl/ HF/H2S
587	Cabot Safety	Rp,Fm,ON	2	DFM	OV/SO2/HCl Cl/Pest
588	Cabot Safety	Rp,Fm,FF	2	DFM	OV/SO2/HCl Cl/Pest
604	Cabot Safety	Es,Mp	1		H2S/Cl

619	Glendale	Rp,Fm,ON	2		SO2/HCL/CI CH2-O
620	Glendale	Rp,Fm,FF	2		SO2/HCL/CI CH2-O
679	Cabot Safety	Rp,Fm,FF	2		OV/SO2/HCI CI
684	3M	Rp,Fm,FF	2		SO2/HCL/CI H2S
689	3M	Rp,Fm,FF	2	DM	SO2/HCL/CI H2S
694	3M	Rp,Fm,FF	2	HRA	SO2/HCL/CI H2S
717	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCI/ H2S/HF
718	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCI/ H2S/HF
719	Willson	Rp,Fm,ON	2	DFMR	OV/SO2/ CI/HCI/ H2S/HF
768	Scott	Rp,Fm,ON	2		SO2/HCI CI/H2S CH2-O
769	Scott	Rp,Fm,ON	2	DM	SO2/HCI CI/H2S CH2-O
770	Scott	Rp,Fm,ON	2	DFMR	SO2/HCI CI/H2S CH2-O
771	Scott	Rp,Fm,ON	2	HRA	SO2/HCI CI/H2S CH2-O

776	Scott	Rp,Fm,ON	2		OV/SO2 HCl/Cl H2S
777	Scott	Rp,Fm,ON	2	DM	OV/SO2/HCl Cl/H2S CH2-O
778	Scott	Rp,Fm,ON	2	DFMR	OV/SO2 HCl/Cl H2S
779	Scott	Rp,Fm,ON	2	HRA	OV/SO2 HCl/Cl H2S
794	Cabot Safety	Rp,Fm,FF	2	HRA	SO2/HCl Cl/OV/Pest
798	Cabot Safety	Rp,Fm,FF	2		HCl/Cl ClO2/SO2
799	Cabot Safety	Rp,Fm,FF	2		OV/SO2/HCl Cl
803	Cabot Safety	Rp,Fm,FF	2	HRA	HCl/Cl ClO2/SO2
805	Cabot Safety	Rp,Fm,FF	2		OV/SO2/HCl Cl
808	Cabot Safety	Rp,Fm,FF	2	DM	HCl/Cl SO2
809	Cabot Safety	Rp,Fm,FF	2	DM	OV/SO2/HCl Cl
812	Cabot Safety	Rp,Fm,FF	2	DFM	OV/HCl/Cl SO2
817	Glendale	Rp,Fm,ON	2		SO2/HCl/Cl CH2-O

819	Glendale	Rp,Fm,ON	2		SO2/HCL/CI CH2-O
832	MSA	Rp,Fm,FF	2	DM	HCL/CI CIO2/SO2
833	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
836	MSA	Rp,Fm,FF	2	HA	HCL/CI CIO2/SO2
837	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
839	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI CIO2/SO2 Pest
843	MSA	Rp,Fm,FF	2	DM	HCL/CI CIO2/SO2
844	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
851	MSA	Rp,Fm,FF	2	HA	HCL/CI CIO2/SO2
852	MSA	Rp,Fm,FF	2	DM	OV/HCL/CI CIO2/SO2
853	MSA	Rp,Fm,FF	2	DFMR	OV/HCL/CI CIO2/SO2 Pest
854	MSA	Rp,Fm,FF	2	HA	OV/HCL/CI CIO2/SO2 Pest
866	3M	Su,ON	2		H2S/CI HCI/SO2
869	3M	Su,ON	2	DM	H2S/CI HCI/SO2

877	3M	Rp,Fm,FF	2		SO2/HCL/CI H2S
882	3M	Rp,Fm,FF	2	DM	SO2/HCL/CI H2S
887	3M	Rp,Fm,FF	2	HRA	SO2/HCL/CI H2S
902	Cabot Safety	Rp,Fm,ON	2	DFMR	HCI/CI CIO2/SO2
903	Cabot Safety	Rp,Fm,FF	2	DFMR	HCI/CI CIO2/SO2
904	Cabot Safety	Rp,Fm,FF	2	DFMR	HCI/CI CIO2/SO2
905	Cabot Safety	Rp,Fm,ON	2	DFMR	OV/HCI/CI SO2/Pest
906	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/HCI/CI SO2/Pest
907	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/HCI/CI SO2/Pest
914	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/HCI/CI SO2/Pest
915	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/HCI/CI SO2/Pest
929	MSA	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCI/CI CIO2/SO2 Pest
930	MSA	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCI/CI CIO2/SO2 Pest
931	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCI/CI CIO2/SO2 Pest



932	MSA	Rp,Bm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
933	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
934	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
946	MSA	Rp,Fm,FF	2	DM	HCl/Cl ClO2/SO2
947	MSA	Rp,Fm,FF	2	DM	OV/HCl/Cl ClO2/SO2
951	MSA	Rp,Fm,FF	2	HA	HCl/Cl ClO2/SO2
952	MSA	Rp,Fm,FF	2	HA	OV/HCl/Cl ClO2/SO2 Pest
953	MSA	Rp,Fm,FF	2	DFMR	OV/HCl/Cl ClO2/SO2 Pest
957	MSA	Rp,Fm,FF	2	DM	OV/HCl/Cl ClO2/SO2
961	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/HCl/Cl ClO2/SO2 Pest
981	Cabot Safety	Rp,Fm,FF	2		H2S/SO2/Cl HCl
982	Cabot Safety	Rp,Fm,FF	2	DM	H2S/SO2/Cl HCl
983	Cabot Safety	Rp,Fm,FF	2	DFM	H2S/SO2/Cl HCl

984	Cabot Safety	Rp,Fm,FF	2		OV/SO2/Cl HCl
985	Cabot Safety	Rp,Fm,FF	2	DM	OV/SO2/Cl HCl
986	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/SO2/Cl HCl/Pest
995	Cabot Safety	Rp,Fm,FF	2		OV/SO2/Cl HCl
996	Cabot Safety	Rp,Fm,FF	2	DFMR	OV/SO2/Cl HCl/Pest
998	Cabot Safety	Rp,Fm,FF	2	DFM	OV/SO2/Cl HCl/Pest
1000	Cabot Safety	Rp,Fm,FF	2	HRA	SO2/Cl HCl/H2S
1001	Cabot Safety	Rp,Fm,FF	2	HRA	SO2/Cl HCl/H2S Pest
1020	3M	Su,ON	2	HRA	H2S/Cl HCl/SO2
1042	Willson	Su,ON	2		OV/Cl HCl/SO2
1043	Willson	Su,ON	2	DM	OV/Cl HCl/SO2
1050	Willson	Su,ON	2	HR	OV/Cl HCl/SO2
1054	MSA	PAPR,FF	2		OV/SO2 Cl2/HCl
1056	MSA	PAPR,FF	2	HA	OV/SO2 Cl2/HCl Pest

1057	MSA	PAPR,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/SO2 CL2/HCl Pest
1061	Scott	Es,Mp	1		H2S/SO2 HCl/Cl
1063	3M	Rp,Fm,ON	2		SO2/Cl HCl/H2S
1068	3M	Rp,Fm,ON	2	DM	SO2/Cl HCl/H2S
1073	3M	Rp,Fm,ON	2	HRA	SO2/Cl HCl/H2S
1077	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/H2S
1078	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/H2S OV
1085	MSA	Rp,Fm,FF	2	HA	Cl/HCl SO2/H2S
1086	MSA	Rp,Fm,FF	2	DM	Cl/HCl SO2/H2S OV
1087	MSA	Rp,Fm,FF	2	DFMR	Cl/HCl SO2/H2S OV/Pest
1088	MSA	Rp,Fm,FF	2	HA	Cl/HCl SO2/H2S OV/Pest
1093	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	Cl/HCl SO2/H2S OV/Pest
1132	Survivair	Su,ON	2		SO2/Cl HCl/OV

1140	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/OV/ H2S/HF
1144	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/OV/ H2S
1147	Willson	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/OV/ H2S/HF
1152	Willson	Rp,Fm,ON	2	DFM	SO2/Cl/ HCl/OV/ H2S/HF
1156	Willson	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/OV/ H2S
1158	MSA	Rp,Fm,FF	2	DM	SO2/Cl/ HCl/H2S
1159	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/H2S
1163	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/H2S
1164	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/H2S/ OV/Pest
1165	MSA	Rp,Fm,FF	2	DFMR	OV/SO2/Cl/ HCl/H2S/ Pest
1169	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/H2S
1172	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	OV/SO2/Cl/ HCl/H2S Pest

1177	MSA DE CHILI	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S
1178	MSA DE CHILI	Rp,Fm,ON	2		OV/SO2/Cl/ HCl/H2S
1179	MSA DE CHILI	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/H2S
1180	MSA DE CHILI	Rp,Fm,ON	2	DFMR	OV/SO2/Cl/ HCl/H2S
1190	MSA	Rp,Fm,FF	2	DM	SO2/Cl/ HCl/H2S
1191	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/ClO2
1195	MSA	Rp,Fm,FF	2	HA	SO2/Cl/ HCl/H2S
1196	MSA	Rp,Fm,FF	2	HA	OV/SO2/Cl/ HCl/H2S Pest
1197	MSA	Rp,Fm,FF	2	DFMR	OV/SO2/Cl/ HCl/H2S Pest
1201	MSA	Rp,Fm,FF	2	DM	OV/SO2/Cl/ HCl/H2S
1204	MSA	Rp,Fm,FF	2	HA	OV/SO2/Cl/ HCl/H2S Pest
NOT APPROVED FOR RADIONUCLIDES					
1217	Scott	Mp,Es	1	DM	H2S/SO2/ Cl/HCl
1224	Moldex-Metric	Rp,Fm,Su,ON	2		SO2/Cl/ HCl/HF/ H2S

1225	Moldex-Metric	Rp,Fm,Su,ON	2		OV/SO2/CI/ HCl/HF
1231	Cabot Safety	Rp,Fm,ON	2		SO2/CI/ HCl/H2S
1232	Cabot Safety	Rp,Fm,ON	2	DM	SO2/CI/ HCl/H2S
1233	Cabot Safety	Rp,Fm,ON	2	DFMR	SO2/CI/ HCl/H2S
1234	Cabot Safety	Rp,Fm,ON	2	HRA	SO2/CI/ HCl/H2S
1235	Cabot Safety	Rp,Fm,ON	2		OV/SO2/CI/ HCl
1236	Cabot Safety	Rp,Fm,ON	2	DM	OV/SO2/CI/ HCl
1237	Cabot Safety	Rp,Fm,ON	2	DFMR	OV/SO2/CI/ HCl/Pest
1238	Cabot Safety	Rp,Fm,ON	2	HRA	OV/SO2/CI/ HCl/Pest
1248	Cabot Safety	Rp,Fm,ON	2	DFMR	OV/SO2/CI/ HCl/Pest
1250	MSA	PAPR,ON	2		SO2/CI/OV/ HCl
1252	MSA	PAPR,ON	2	HA	SO2/CI/OV/ HCl/Pest
1253	MSA	PAPR,ON	2	HA	SO2/CI/OV/ HCl/Pest
		NOT APPROVED FOR RADIONUCLIDES			
1272	Survivair	Su,ON	2	DM	SO2/CI/OV/ HCl/CH2-O

1275	Survivair	Su,ON	2	DFM	SO2/Cl/OV/ HCl/CH2-O
1277	MSA	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S
1278	MSA	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S/ OV
1281	MSA	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/H2S
1282	MSA	Su,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	SO2/Cl/ HCl/H2S/ OV/Pest
1282	Critical Services	Su,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	SO2/Cl/ HCl/H2S/ OV/Pest
1283	MSA	Rp,Fm,ON	2	HA	SO2/Cl/ HCl/H2S/ OV
1312	MSA	PAPR,ON	2		SO2/Cl/ HCl/H2S
1313	MSA	PAPR,ON	2	HA	SO2/Cl/ HCl/H2S
1314	MSA	PAPR,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	SO2/Cl/ HCl/H2S
1315	MSA	PAPR,FF	2		SO2/Cl/ HCl/H2S
1316	MSA	PAPR,FF	2	HA	SO2/Cl/ HCl/H2S

1317	MSA	PAPR,FF	2	HA	SO2/Cl/ HCl/H2S
NOT APPROVED FOR RADIONUCLIDES					
1320	3M	Su,ON	2	DM	SO2/Cl/ HCl/H2S
1321	3M	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/H2S
1330	3M	Su,ON	2	HR	SO2/Cl/ HCl/H2S
NOT APPROVED FOR RADIONUCLIDES					
1331	3M	Rp,Fm,ON	2	HR	SO2/Cl/ HCl/H2S
NOT APPROVED FOR RADIONUCLIDES					
1339	Moldex-Metric	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/H2S/HF
1340	Moldex-Metric	Rp,Fm,ON	2	DM	OV/SO2/Cl/ HCl
1342	Moldex-Metric	Rp,Fm,ON	2	DM	Cl/H2S/HF SO2/HCl
1343	Moldex-Metric	Rp,Fm,ON	2	DM	HF/OV/SO2 Cl/HCl
1360	Cabot	Rp,Fm,FF	2		OV/SO2/ Cl/HCl
1362	Cabot	Rp,Fm,FF	2		OV/SO2/ Cl/HCl/Pest
1382	MSA	Rp,Fm,ON	2		OV/SO2/ Cl/HCl/H2S
1383	MSA	Rp,Fm,ON	2	HRA	OV/SO2/ Cl/HCl/H2S
1388	Cabot	Rp,Fm,FF	2		SO2/ Cl/HCl/H2S



1389	Cabot	Rp,Fm,FF	2	DM	SO2/ Cl/HCl/H2S
1390	Cabot	Rp,Fm,FF	2	DFMR	SO2/ Cl/HCl/H2S
1391	Cabot	Rp,Fm,FF	2	HRA	SO2/ Cl/HCl/H2S
1392	Cabot	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl
1393	Cabot	Rp,Fm,FF	2	DFMR	OV/SO2/ Cl/HCl/Pest
1403	Cabot	Rp,Fm,FF	2	DFM	OV/SO2/ Cl/HCl/Pest
1404	Cabot	Mp,Es	2	DM	SO2/ Cl/HCl

CHEMICAL CARTRIDGES - OTHER GASES AND VAPORS - FORMALDEHYDE

Approval Number TC-23C-	Approval Issued to	Respirator and Facepiece Type	Number of Approvals Cartridges	Other and DFM	Gas Vapor
115	Scott	Rp,Fm,ON	2		SO2/HCl Cl/H2S ClO2
REPLACED BY TC-23C-768					
116	Scott	Rp,Fm,ON	2	DM	SO2/HCl Cl/H2S ClO2
172	Scott	Rp,Fm,ON	2		OV/SO2 HCl/Cl H2S/ClO2
REPLACED BY TC-23C-776					
174	Scott	Rp,Fm,ON	2	DM	OV/SO2 HCl/Cl H2S/ClO2
183	Glendale	Rp,Fm,ON	2		SO2/HCl/ Cl/ClO2
184	Glendale	Rp,Fm,ON	2		SO2/HCl/Cl
207	North	Rp,ON,Fm	2	HRA	HCl/Cl SO2
208	North	Rp,Bm,ON	2	HRA	HCl/Cl/SO2
209	North	Rp,Fm,FF	2	HRA	HCl/Cl/SO2
218	Scott	Rp,Fm,FF	2	DM	SO2/HCl Cl/H2S ClO2
221	Scott	Rp,Fm,FF	2		OV/SO2 Cl/HCl H2S/ClO2
222	Scott	Rp,Fm,FF	2	DM	OV/SO2 Cl/HCl H2S/ClO2

225	Scott	Rp,Fm,FF	2		SO2/HCl Cl/H2S ClO2
226	North	Rp,Fm,ON	2		SO2/HCl Cl
227	North	Rp,Bm,ON	2		SO2/HCl/Cl
228	North	Rp,Fm,FF	2		SO2/HCl/Cl
229	North	Rp,Fm,ON	2	DM	SO2/HCl Cl
230	North	Rp,Bm,ON	2	DM	SO2/HCl/Cl
231	North	Rp,Fm,FF	2	DM	SO2/HCl/Cl
241	Glendale	Rp,Fm,ON	2		OV/SO2/HCl Cl
242	Glendale	Rp,Fm,ON	2		OV/SO2/HCl Cl
246	Scott	Rp,Fm,ON	2	DFMR	SO2/HCl Cl/H2S ClO2
247	Scott	Rp,Fm,FF	2	DFMR	SO2/HCl Cl/H2S ClO2
250	Scott	Rp,Fm,ON	2	DFMR	OV/SO2 HCl/Cl H2S/ClO2
251	Scott	Rp,Fm,FF	2	DFMR	OV/HCl/Cl ClO2/SO2 H2S
318	Survivair	Rp,Fm,ON	2		SO2/HCl Cl/OV

352	North	Su,ON	1		OV/SO2/Cl HCl
353	North	Su,ON	1		SO2/Cl/HCl
356	North	Su,ON	1	DM	SO2/Cl/HCl
357	North	Su,ON	1	DM	OV/SO2/Cl HCl
359	Pro-Tech	Rp,Fm,ON	2		SO2/HCl Cl
372	3M	Su,ON	1		
397	North	Rp,Fm,ON	2		
398	North	Rp,Fm,ON	2	DM	
399	North	Rp,Fm,ON	2		
400	North	Rp,Fm,ON	2	DM	
401	North	Rp,Fm,FF	2		
402	North	Rp,Fm,FF	2	DM	
407	Glendale	Rp,Fm,FF	2		SO2/HCl/ Cl/ClO2
408	Glendale	Rp,Fm,FF	2		SO2/HCl/Cl
410	Glendale	Rp,Fm,FF	2		SO2/OV/HCl Cl
411	Glendale	Rp,Fm,FF	2		SO2/OV/HCl Cl
429	Survivair	Rp,Fm,FF	2		SO2/HCl/Cl

430	Survivair	Rp,Fm,ON	2		SO2/HCl/Cl
431	Survivair	Rp,Fm,ON	2	DM	SO2/HCl/Cl
432	Survivair	Rp,Fm,FF	2	DM	SO2/HCl/Cl
433	Survivair	Rp,Fm,ON	2	DM	SO2/HCl Cl/OV
434	Survivair	Rp,Fm,ON	2	DM	SO2/HCl Cl/OV
454	Survivair	Rp,Fm,FF	2		SO2/HCl Cl/OV
459	Pro-Tech	Rp,Fm,ON	2	HRA	SO2/HCl Cl
475	3M	Rp,Fm,ON	2		OV
486	3M	Su,ON	1	DM	
503	3M	Rp,Fm,ON	2	DM	OV
505	Cabot Safety	Rp,Fm,ON	2		
506	Cabot Safety	Rp,Fm,FF	2		
507	Cabot Safety	Rp,Fm,ON	2	DM	
508	Cabot Safety	Rp,Fm,FF	2	DM	
511	MSA	Rp,Fm,ON	1	DM	SO2/HCl Cl
512	MSA	Rp,Fm,ON	1	DM	OV/SO2/HCl Cl

517	Scott	Rp,Fm,ON	2	HRA	SO2/HCl Cl/H2S ClO2
REPLACED BY TC-23C-771					
518	Scott	Rp,Fm,FF	2	HRA	SO2/HCl Cl/H2S ClO2
521	Scott	Rp,Fm,ON	2	HRA	OV/SO2 HCl/Cl H2S/ClO2
REPLACED BY TC-23C-779					
522	Scott	Rp,Fm,FF	2	HRA	OV/HCl Cl/ClO2 SO2/H2S
532	Survivair	Rp,Fm,ON	2	DFMR	SO2/HCl Cl/OV
533	Survivair	Rp,Fm,FF	2	DFMR	SO2/HCl Cl/OV
593	Racal	PAPR,HH	3		SO2/Cl/HCl
594	Racal	PAPR,FF	3		SO2/Cl/HCl
595	Racal	PAPR,HH	3		SO2/Cl/HCl
596	Racal	PAPR,HH	3		SO2/Cl/HCl
597	Racal	PAPR,HH	3	HRA	SO2/Cl/HCl
598	Racal	PAPR,FF	3	HRA	SO2/Cl/HCl
599	Racal	PAPR,HH	3	HRA	SO2/Cl/HCl
600	Racal	PAPR,HH	3	HRA	SO2/Cl/HCl
603	Racal	PAPR,HH	3	HRA	SO2/Cl/HCl

613	Racal	PAPR,ON	3		SO2/Cl/HCl
614	Racal	PAPR,ON	3	HRA	SO2/Cl/HCl
619	Glendale	Rp,Fm,ON	2	HRA	SO2/Cl/ HCl/ClO2
620	Glendale	Rp,Fm,FF	2	HRA	SO2/Cl/ HCl/ClO2
621	Glendale	Rp,Fm,ON	2	HRA	SO2/Cl/HCl OV
622	Glendale	Rp,Fm,FF	2	HRA	SO2/Cl/HCl OV
634	Racal	PAPR,HH	3		SO2/HCl Cl
635	Racal	PAPR,HH	3	HRA	SO2/HCl Cl
652	North	Rp,Fm,ON	2	DFM	SO2/HCl Cl
653	North	Rp,Bm,ON	2	DFM	SO2/HCl Cl
654	North	Rp,Fm,FF	2	DFM	SO2/HCl Cl
671	Pro-Tech	Rp,Fm,FF	2		SO2/Cl HCl
673	Pro-Tech	Rp,Fm,FF	2	HRA HCl	SO2/Cl
697	3M	Rp,Fm,FF	2		OV
698	3M	Rp,Fm,FF	2	DM	OV

699	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S
700	Willson	Rp,Fm,FF	2		SO2/Cl/ HCl/H2S
701	Willson	Rp,Fm,ON	2		SO2/Cl/ HCl/H2S
702	Willson	Rp,Bm,ON	2		SO2/Cl/HCl
703	Willson	Rp,Bm,FF	2		SO2/Cl/HCl
704	Willson	Rp,Bm,ON	2		SO2/Cl/HCl
705	Willson	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/H2S
706	Willson	Rp,Fm,ON	2	DM	SO2/Cl/ HCl/H2S
707	Willson	Rp,Fm,FF	2	DM	SO2/Cl/ HCl/H2S
708	Willson	Rp,Bm,ON	2	DM	SO2/Cl/HCl
709	Willson	Rp,Bm,FF	2	DM	SO2/Cl/HCl
710	Willson	Rp,Bm,ON	2	DM	SO2/Cl/HCl
711	Willson	Rp,Fm,ON	2	DFM	SO2/Cl/ HCl/H2S
712	Willson	Rp,Fm,FF	2	DFM	SO2/Cl/ HCl/H2S
713	Willson	Rp,Fm,FF	2	DFM	SO2/Cl/ HCl/H2S
714	Willson	Rp,Bm,ON	2	DFM	SO2/Cl/HCl



715	Willson	Rp,Bm,FF	2	DFM	SO2/Cl/HCl
716	Willson	Rp,Bm,ON	2	DFM	SO2/Cl/HCl
741	Willson	Rp,Fm,ON	2		SO2/Cl/HCl
742	Willson	Rp,Fm,ON	1		SO2/Cl/HCl
746	Willson	Rp,Fm,FF	2		SO2/Cl HCl
749	Willson	Rp,Fm,FF	2	DM	SO2/Cl HCl
754	Willson	Rp,Fm,ON	2	DM	SO2/Cl/HCl
757	Willson	Rp,Fm,ON	1	DM	SO2/Cl/HCl
765	Willson	Rp,Fm,ON	2	HA	SO2/Cl/HCl
766	Willson	Rp,Fm,FF	2	HA	SO2/Cl HCl
768	Scott	Rp,Fm,ON	2		HCl/Cl SO2/H2S ClO2
769	Scott	Rp,Fm,ON	2	DM	HCl/Cl SO2/H2S ClO2
770	Scott	Rp,Fm,ON	2	DFMR	HCl/Cl SO2/H2S ClO2
771	Scott	Rp,Fm,ON	2	HRA	HCl/Cl SO2/H2S ClO2
789	Willson	Rp,Fm,ON	2	DFMR	SO2/Cl/HCl

790	Willson	Rp,Fm,FF	2	DFMR	SO2/CI HCl
804	Cabot Safety	Rp,Fm,FF	2		
811	Cabot Safety	Rp,Fm,FF	2	DM	
817	Glendale	Rp,Fm,ON	2		HCl/CI/ SO2/CLO-2
818	Glendale	Rp,Fm,ON	2	DM	HCl/CI/SO2
819	Glendale	Rp,Fm,ON	2	HRA	HCl/CI/ SO2/CLO-2
820	Glendale	Rp,Fm,ON	2		HCl/CI/SO2 OV
821	Glendale	Rp,Fm,ON	2	DM	HCl/CI/SO2 OV
822	Glendale	Rp,Fm,ON	2	HRA	HCl/CI/SO2 OV
829	Willson	Rp,Fm,ON	1	DFM	SO2/CI/HCl
864	3M	Su,ON	2		OV
867	3M	Su,ON	2	DM	OV
890	3M	Rp,Fm,FF	2		OV
891	3M	Rp,Fm,FF	2	DM	OV
894	Racal	PAPR,HH	3	HRA	SO2/CI/HCl
896	Racal	PAPR,HH	3	HRA	SO2/CI/HCl

911	Cabot Safety	Rp,Fm,ON	2	DFMR	
912	Cabot Safety	Rp,Fm,FF	2	DFMR	
913	Cabot Safety	Rp,Fm,FF	2	DFMR	
917	MSA	Rp,Fm,ON	2	DM	OV/SO2/ Cl/HCl
918	MSA	Rp,Bm,ON	2	DM	OV/SO2/ Cl/HCl
919	MSA	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl
920	MSA	Rp,Bm,ON	2	DM	OV/SO2/ Cl/HCl
921	MSA	Rp,Fm,FF	2	DM	OV
922	MSA	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl
923	MSA	Rp,Fm,ON	2	HA	OV/SO2/ Cl/HCl
924	MSA	Rp,Bm,ON	2	HA	OV/SO2/ Cl/HCl
925	MSA	Rp,Bm,ON	2	HA	OV/SO2/ Cl/HCl
926	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl
927	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl
928	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl

958	MSA	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl
960	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl
966	Critical Products Group	Rp,Fm,ON	2	HA	SO2/Cl HCl
992	Cabot Safety	Rp,Fm,FF	2		
993	Cabot Safety	Rp,Fm,FF	2	DM	
994	Cabot Safety	Rp,Fm,FF	2	DFMR	
1012	3M	Su,ON	2	HRA	OV
1044	Willson	Su,ON	2		SO2/Cl HCl
1045	Willson	Su,ON	2	DM	SO2/Cl HCl
1051	Willson	Su,ON	2	HA	SO2/Cl HCl
1060	Hornell Speedglas	PAPR,HH	3	HRA	SO2/Cl/HCl
1065	3M	Rp,Fm,ON	2		OV
1071	3M	Rp,Fm,ON	2	DM	OV
1076	3M	Rp,Fm,ON	2	HRA	OV
1091	MSA	Rp,Fm,FF	2	DM	
1092	MSA	Rp,Fm,FF	2	HA	

1096	North	Su,ON	2		SO2/Cl/ HCL
1100	North	Su,ON	2	DM	SO2/Cl/ HCL
1106	North	Su,ON	2	HR	SO2/Cl/ HCL
1110	North	Su,ON	2	DFM	SO2/Cl/ HCL
1126	Racal	Rp,Fm,FF	1		SO2/Cl/ HCL
1127	Racal	Rp,Fm,FF	1	HRA	SO2/Cl/ HCL
1131	Survivair	Su,ON	2		SO2/Cl/ HCL
1141	Willson	Rp,Fm,ON	2		SO2/Cl/ HCL/H2S
1148	Willson	Rp,Fm,ON	2	DM	SO2/Cl/ HCL/H2S
1153	Willson	Rp,Fm,ON	2	DFM	SO2/Cl/ HCL/H2S
1170	MSA	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl
1171	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl
1185	Racal	PAPR,HH	3		
1186	Racal	PAPR,HH	3	HRA	SO2/Cl/ HCl
1202	MSA	Rp,Fm,FF	2	DM	OV/SO2/ Cl/HCl

1203	MSA	Rp,Fm,FF	2	HA	OV/SO2/ Cl/HCl
1221	National Draeger	Rp,Fm,FF	1	DM	SO2/Cl/ HCl
1243	Cabot Safety	Rp,Fm,ON	2		
1244	Cabot Safety	Rp,Fm,ON	2	DM	
1245	Cabot Safety	Rp,Fm,ON	2	DFMR	
1259	MSA	Rp,Fm,ON	2		
1260	MSA	Rp,Fm,ON	2	HA	
1261	MSA	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HA	
1265	MSA	Rp,Fm,FF	2		
1266	MSA	Rp,Fm,FF	2	HA	
1267	MSA	Rp,Fm,FF NOT APPROVED FOR RADIONUCLIDES	2	HA	
1271	Survivair	Su,ON	2	DM	SO2/Cl/ HCl
1287	Hornell Speedglas	PAPR,HH	3	HRA	SO2/Cl
1288	North	Su,ON	2		OV
1289	North	Su,ON	2	DM	OV
1290	North	Su,ON	2	HR	OV

1291	North	Su,ON	2	DFM	OV
1292	North	Rp,Fm,ON	2		OV
1293	North	Rp,Fm,ON	2	DM	OV
1294	North	Rp,Fm,ON	2	HRA	OV
1295	North	Rp,Fm,ON	2	DFM	OV
1296	North	Rp,Bm,ON	2		OV
1297	North	Rp,Bm,ON	2	DM	OV
1298	North	Rp,Bm,ON	2	HRA	OV
1299	North	Rp,Bm,ON	2	DFM	OV
1300	North	Rp,Fm,FF	2		OV
1301	North	Rp,Fm,FF	2	DM	OV
1302	North	Rp,Fm,FF	2	HRA	OV
1303	North	Rp,Fm,FF	2	DFM	OV
1304	National Draeger	Rp,Fm,ON	1		Cl/HCL/ SO2
1326	3M	Su,ON	2	DM	OV
1327	3M	Rp,Fm,ON	2	DM	OV
1336	3M	Su,ON NOT APPROVED FOR RADIONUCLIDES	2	HR	OV
1337	3M	Rp,Fm,ON NOT APPROVED FOR RADIONUCLIDES	2	HR	OV