



GUIDE TO OCCUPATIONAL EXPOSURE VALUES-1992

Compiled by the American Conference
of Governmental Industrial Hygienists

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INTRODUCTION

This *Guide to Occupational Exposure Values* is intended to serve as a readily accessible reference for comparison of the most recently published values. The values listed are the 1992-1993 Chemical Substances Threshold Limit Values (TLVs) from the American Conference of Governmental Industrial Hygienists (ACGIH); the 1989 new or amended Permissible Exposure Limits (PELs) from the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA); the Recommended Exposure Limits (RELs) from the U.S. National Institute for Occupational Safety and Health (NIOSH); and the 1991 Maximum Concentration Values in the Workplace (MAKs) from the Deutsche Forschungsgemeinschaft (DFG), Federal Republic of Germany, Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area.

This Guide also includes those carcinogens found in the occupational environment that are identified by the above organizations, the U.S. Environmental Protection Agency (EPA), the International Agency for Research on Cancer (IARC), and the U.S. National Toxicology Program (NTP).

This *Guide to Occupational Exposure Values* is intended as a companion document to the annual *Threshold Limit Values and Biological Exposure Indices* Booklet, particularly the section on "Threshold Limit Values for Chemical Substances in the Work Environment." Beginning with the 1988-1989 edition of the TLV/BE Booklet, identification was made of those substances for which OSHA and/or NIOSH has a PEL or a REL lower than the TLV. Also included are those substances identified by other sources as a suspected or confirmed human carcinogen.

The ACGIH believes there is a need to specifically address such identifications. In response, this ready reference Guide of TLVs, Federal standards and recommendations, and other significant values has been developed. For the user's convenience, the inside back cover provides "Definitions, Abbreviations, Terms and Coding," simply fold down the flap for a quick reference. The MAK Peak Exposure Limitation Categories, the Embryo/Fetus Risk of Damage Classification, and the MAK Germ Cell Mutagens Classification are also listed on the inside back cover.

Sources used in preparing this volume include: *Classification of Carcinogens by Different Countries and Organizations*, Laboratory for Environmental and Occupational Cancer, Institute for Cancer Research, Oslo, Norway (October 1991); *Code of Federal Regulations, 29 CFR 1910.1000-1910.1200 as of July 1, 1992*, U.S. Government Printing Office, Washington, DC (1991); *IARC Monographs on the Evaluation of the Carcinogenic Risk to Humans, Supplement 7*, International Agency for Research on Cancer, Lyon, France (1987); *Maximum Concentrations in the Workplace and Biological Tolerance Values for Working Materials 1991*, Report No. XXVII, Commission for the Investigation of Hazards of Chemical Compounds in the Work Area, Federal Republic of Germany, VCH Publishers, Weinheim, Germany (July 21, 1991); *NIOSH Recommendations for Occupational Safety and Health—Compendium of Policy Documents and Statements*, National Institute for Occupational Safety and Health, Cincinnati, OH, January, 1992; *Sixth Annual Report on Carcinogens—1991 Summary*, National Toxicology Program, Research Triangle Park, NC (1991); *Threshold Limit Values and Biological Exposure Indices for 1992-1993*, American Conference of Governmental Industrial Hygienists, Cincinnati, OH (1992).

Comments and suggestions are welcomed.

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEL	CANC. RGTN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
Acetaminophen	30	60	50	270	30	60	50	270					50	30		ARC 2 ARC 3 ARC 4 ARC 5
73-17-0	NIOSH 42 CFR 43								Ca. OSHA 145 CFR 100.1014							ARC 2 ARC 3 ARC 4
Acetamide																ARC 2 ARC 3
50-15-5																
Acetic acid	10	25	15	37	10	25			10	25	5	37	10	25		
64-19-7																
Acetic anhydride	10	25	15	37			15	37			15	37	5	20		
108-24-7																
Acetone	50	100	1000	2300	50	100	1000	2400	250	500			1000	2400		
67-64-1																
Acetone cyanohydrin									1	1						
75-05-5									15-min TWA ceiling							
Acetone	40	80	50	10	40	80	50	10	20	40			40	80		
75-05-5																
2-Acetylaminofluorene																ARC 2 ARC 3 ARC 4
53-28-3					Ca. OSHA 28 CFR 1910.1014				Ca. OSHA 28 CFR 1910.1014							ARC 2 ARC 3 ARC 4
Acetone									2500	2500						
74-86-2									15-min TWA ceiling							

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEL	CANC. RGTN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
Acetone	200	400			200	400			200	400			200	400		
12-Dichloroethane																
540-58-0																
Acetone	1	14			1	14							1	14		
75-27-6																
Acetone	5				5				5							
50-78-2																
Acetone	0.1	0.25	0.3	0.8	0.1	0.25	0.3	0.8	0.1	0.25	0.3	0.8	0.1	0.25		ARC 2
107-02-8																
Acetone	0.03	0.2			0.03				0.03							ARC 2 ARC 3 ARC 4 ARC 5
75-05-5	Stop				Stop				Ca. Stop				100	20		
Acetone	2	50			10	30			2	6						ARC 3
75-05-5	Stop				Stop				Stop							
Acetone	10	52			10	50			10	50			10	50		
141-32-2																
Acetone	5	20	15	42	5	20	25	100					5	20		ARC 2 ARC 3 ARC 4 ARC 5
75-05-5									Ca. (LOD 4 ppm)							
Acetone	10	35			10	30			10	30			5	10		
75-05-5	Stop				Stop				Stop				5			

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202-96-244-1100-26 AL-ES

[illegible]

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SUBSTANCE	ACCN FLVS				OSHA PELs				NIOSH RELs				OPE HANS				PLUM	CARCINOGEN
	TWA		STEL/CEIL(C)		TWA		STEL/CEIL(C)		TWA		STEL/CEIL(C)		TWA		STEL/CEIL(C)			
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
3-Amino-1,2,4-triazole AMT (94) 5-32-5	0.2				0.2				0.2				0.2				PA 82 ARC 78 NCSm-4 V10-2	
Amblyone 3-Amino-1,2,4-triazole 5-32-5	0.2				0.2				0.2				0.2				PA 82 ARC 78 NCSm-4 V10-2	
Amblyone 584-4-7	25	17	25	24			25	27	25	18	25	27	50	35				
Amblyone chloride TMS 2-25-02-4	10			20	10			20	10			20						
Amblyone perfluorooctanoate 1425-25-1	0.1								1									
Amblyone sulfoxide TMS-0	10				10	5-11			10	5-11			15					
Ammonia 121-72-8	35	24.11			0.2	100	100		0.1	100			0.05				ARC 78 NCSm-4 V10-2	
Ammonia 43-7	100	332			100	325			100	325			100	325				
Ammonia 525-36-0	25	683			25	680			100	680			100	325				

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMSL		PEAK	CANCEROGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	TLV		
Arsine & homologues	1	1		2	1								1	1	1	1
10102-36-7			See 1				See 1				See 1					1
Arsine	1	1		2	1								1	1	1	1
10102-36-7			See 1				See 1				See 1					1
o-Arsine hydrochloride																1
10102-36-7																1
Arsine (acid) & compounds at 50		1			1				1				1	1	1	1
Arsine (acid) handling and use at 50		1														1
Arsine (acid) production		1														1
10102-36-7																1
ANTU	1	1		2	1				1				1	1	1	1
10102-36-7																1
Arsine																1
10102-36-7																1
Arsine peroxide																1
10102-36-7																1

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DGC MMSL		PEAK	CANCEROGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	TLV		
Arsine (acid) & inorganic compounds (except arsine) at 50	1	1		2	1				1						1	1
10102-36-7							See 1				See 1					1
Arsine (acid) production		1														1
10102-36-7																1
Arsine (acid) and other acids																1
10102-36-7																1
Arsine	1	1		2	1				1				1	1	1	1
10102-36-7																1
Arsine, Arsenic	1	1		2	1				1				1	1	1	1
10102-36-7							See 1				See 1					1
Arsine, Chloride	1	1		2	1				1				1	1	1	1
10102-36-7							See 1				See 1					1
Arsine, Oxide	1	1		2	1				1				1	1	1	1
10102-36-7							See 1				See 1					1
Arsine, other forms	1	1		2	1				1				1	1	1	1
10102-36-7							See 1				See 1					1
Arsine (peroxide)																1
10102-36-7																1

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE BASE		CLASS	CARCINOGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV		
Bromochloromethane (chloroform) 74-81-5	200	250			200	250			200	250			200	250		
Bromomethane (methyl bromide) 74-83-4	10	12	42		200	190	150	0					200	190	2	42
Bromobenzene 75-25-2	2.5	3.2			0.5	5			3.5	5						
Brown coal dust (soft coal dust)																MSD 41
1,3-Butadiene 106-99-2	10	12	42		1000	2200	2"	10"								TLV 42 PEL 22 MSD 42 N-15-1
Butane 106-97-8	800	1000			800	1000			900	900			1000	1350		
1,4-Butadiene 106-95-6																MSD 8
1,3,5-Butadiene 107-12-5																MSD 42
1,4-Butadiene sulfolene (sulfolene) 55-88-1																ARC MSD 1

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE BASE		CLASS	CARCINOGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV		
Butyraldehyde (butyral) 78-12-5	2.5	3			2.5	1.5			3.5	1.8			3.5	1.5		
2-Butanone (methyl ethyl ketone) 78-93-3	200	500	300	800	200	500	300	800	200	500	300	800	200	500	11	1
2-Butanethiol (ethyl mercaptan) 107-16-2	25	121			25	120			5	24			20	100	11	1
2-Buten-1-ol (butenol) 107-07-2									5	31			20	120	11	1
n-Butyl acetate 123-86-4	100	173	1200	1500	100	710	200	800	100	710	200	800	200	800		
sec-Butyl acetate 105-85-4	200	800			200	800			200	800			200	800		
tert-Butyl acetate 108-28-4	200	800			200	800			200	800			200	800		
n-Butyl alcohol 109-76-2	10	52			10	50			10	50			10	50		ARC 1
n-Butyl alcohol 109-76-2			C50	C150			C50	C150			C50	C150	100	300	11	1
n-Butyl alcohol 109-76-2																

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMSL				PLAC	CARCINOGEN
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING		
iso-Butyl alcohol 108-10-1	100	100			100	100			100	100	50	150	100	100				
sec-Butyl alcohol 108-10-1	100	100	100	150	100	100	50	150	100	100	50	150	100	100				
n-Butylamine 107-11-9			10	10			5	10			10	10	5	5		2		
sec-Butylamine 107-11-9			See				See				See							
tert-Butylamine 108-10-1													5	5		2		
tert-Butylamine 108-10-1													5	5		2		
tert-Butyl chromate as CrO ₃ 101-26-1				10				10				100						
1,2-Butylene oxide 106-68-7																		
n-Butyl glycidyl ether 106-68-7	10	10			10	10					10	10						
tert-Butyl glycidyl ether 106-68-7																		

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DGC MMSL				PLAC	CARCINOGEN
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING		
n-Butyl alcohol 108-22-1	5	50			5	25			5	25								
Butyl mercaptan B-lanthan 106-76-5	10	10			0.5	1.5					0.5	1.5	0.5	0.5		1		
n-sec-Butylamine 107-11-9	5	30			5	30			5	30								
p-tert-Butylphenol 95-54-4													0.05	0.5		1		
Butylphenoxyacrylate phenoxide salt Aramid 140-57-4																		ARC 19
p-tert-Butylphenol 95-54-4	10	60	120	120	10	60	20	120	10	60	20	120	10	60				
o-Butylphenol 108-60-0																		ARC 19
n-Butylamine 107-11-9									5	22								
Carbonium chloride 101-08-4-2	See Carbonium chloride in C-101-08-4-2 Total dust: 100 mg/m ³ Aerosol: 100 mg/m ³																	ARC 19 ARC 19 ARC 19

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MARK		PLAC	CARC. NOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
Carbon monoxide	35				35				35							
1502-86-2																
Carbon black	3.5				3.5				3.5							
1332-35-4																
Carbon black	5000	1000	10 000	54 000	5 000	1 000	10 000	54 000	5000	1000	10 000	54 000	5000	1000		
1343-38-9																
Carbon disulfide	2	21			4	2	12	38	1	1	1	30	2	10		
75-15-2		Sum 21				Sum				Sum				8		
Carbon monoxide	25	25			25	40	1200	1220	15	40	1200	1220	10	11		
530-28-0		61												8		
Carbon tetrachloride	21	14	13	41	21	14	13	41	21	14	13	41				
558-12-4																
Carbon tetrachloride	5 42	1 42			2	12 6				21	12 6		10	15		
50-29-5	5 42	1 42	10 42	52 42						21	12 6			15		
Carbon tetrachloride	21	14			21	14			21	14	12 6	13 1	21	14		
75-44-5										Sum 12 6						
Carbon tetrachloride	2	5 4	5	12	2	5	5	15	2	5	5	15				
1332-50-4																

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MARK		PLAC	CARC. NOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
Catechol	5	11			5	20			5	20						
107-80-9		Sum				Sum				Sum						
Catechol	2				10 11 1				10 11 1							
3024-14-6					10 11 1				10 11 1							
Catechol hydrazide	2				2				2							
21-231-76-1																
Catechol hydrazide									2 5	5 3						
2911-26-2									Sum 12 6							
Chloroacetaldehyde																
308-03-1																
Chloroacetaldehyde																
56-75-7																
Chloroacetaldehyde	0.5				0.5				0.5				0.5			
57-12-9		Sum				Sum			Ca Sum				Ca Sum			
Chloroacetaldehyde									0 001							
50-6									Ca							
Chloroacetic Acid																
115-29-4																

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SUBSTANCE	ACGIH TLV		OSHA PEL		NIOSH REL		DPE MMS		PLAC	CARCINOGEN
	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Chlorinated carbonates Trichloroethylene	35		35				35			ARC 1 NCS 1
300-12-2	See		See		See		See			
Chlorinated carbonates Carbon tetrachloride	35		35		35		35			
50-70-8										
Chlorinated carbonates C ₁₂ 80% Chloroform										ARC 1 NCS 1
50-70-8										
Chlorine	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5		
7782-50-5										
Chlorine dioxide	0.1	0.25	0.1	0.25	0.1	0.25	0.1	0.25		
10049-24-4										
Chlorine trifluoride		0.1	0.1	0.1		0.1	0.1	0.1		
7782-71-2										
Chloromagnesium										ARC 1 NCS 1
134-43-2										
Chloroacetaldehyde		0.1	0.1	0.1		0.1		0.1		
75-07-0										
Chloroacetylene		0.1	0.1	0.1		0.1		0.1		
75-26-3										

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PLAC	CARCINOGEN
	TLV		STEL/CEIL(C)		TLV		STEL/CEIL(C)		TLV		STEL/CEIL(C)		TLV			
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
1-Chloro-2,3-bis(4-chlorophenyl)propane 332-71-4	0.35	0.32			0.35	0.3			0.35	0.3						
Chloroacetyl chloride	0.35	0.25	0.15	0.08	0.05	0.2			0.05	0.2						
75-06-9	See															
Chloroacetone	10	45			75	300							50	230	II	I
105-10-7																
6-Chloro-2,3-bis(4-chlorophenyl)propane 2950-41-1			0.05	0.05			0.05	0.04			0.05	0.04				
Chlorobromomethane Bromochloromethane 74-97-5	200	1000			200	1000			200	1000			200	1000	II	I
1-Chloro-1,2-bis(4-chlorophenyl)ethane 75-99-4	10	30			10	30					C1	C3	10	30	II	I
Chlorobis(4-chlorophenyl)methane	100	1500			1000	3000			1000	1500	1250	4375	500	1000	IV	
75-05-4																
Chlorobis(4-chlorophenyl)methane 45-21-9									0.001				0.1		II	ARC 1 NCS 1
Chlorobis(4-chlorophenyl)methane 11097-00-1		0.5				0.5			0.001				0.05	0.5	III	ARC 1 NCS 1

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMSL		PEAS	CARCINOGEN
	TLV	STEL	CEIL	TLV	STEL	CEIL	TLV	STEL	TLV	STEL	CEIL	TLV	STEL	PEAS		
1-Chloro-2,3-dichloropropene 1004-71-8	2 100 100	10 42 100	10 42 100	2 10 100	10 42 100	10 42 100	2 10 100	10 42 100	2 10 100	10 42 100	10 42 100	2 10 100	10 42 100	10 42 100		ARC 1A MAM 42 NTP 4
Chloroethane (Ethyl Chloride) 78-07-6	100	1500		100	1500							100	1500			ARC 1 MAM 1
2-Chloroethanol (Ethylene Chlorohydrin) 107-07-3		10	100		10	100				10	100		10	100		
1+2-Chloroethoxy-1-methyl-2-propylene-1-methoxy 1004-71-8																ARC 1A NTP 4
Chloroethylene (Vinyl Chloride) 75-01-4	1 A1 100	1 A1 100		1 100	10 100											ARC 1 ARC 1A MAM 41 NTP 4
Chlorofluoromethanes 352-72-4																ARC MAM 42
Chloroform (Trichloromethane) 67-66-3	1 A2 100	10 A2 100		1 10	10 100					10	100	10	100			ARC 1 ARC 1A MAM 41 NTP 4
1-Chloro-2-methyl-2-propyne 540-00-7																ARC 1A
5-Chloro-2-Methyl-2-(3-dimethylsilylpropyl)-3-one and 2-Methyl-2-(3-dimethylsilylpropyl)-3-one mixture in ratio 3:1																ARC 1 MAM 41

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DGC MMSL		PEAS	CARCINOGEN
	TLV	STEL	CEIL	TLV	STEL	CEIL	TLV	STEL	TLV	STEL	CEIL	TLV	STEL	PEAS		
1-Chloro-2-methyl-2-propyne 540-00-7	100 A1	100 A1														ARC 1A ARC 1 MAM 41 NTP 4
Chloroethylene Vinyl Chloride 75-01-4	1 A1	10 A1														ARC 1 ARC 1A MAM 41 NTP 4
3-Chloro-2-methylpropene 543-47-3																MAM 41 NTP 4
1-Chloro-2-methylpropene 543-47-3																MAM 41 NTP 4
1-Chloro-1-methylpropene 500-25-9	2	10		2	10		2	10				20	100			
Chloroethylene 20% 70% mixture in ratio 1:1 CAS 543-47-3																MAM 41
4-Chloro-o-phenylene diamine 68-42-0																ARC 1A NTP 4
4-Chloro-o-toluidine																ARC 1A MAM 41
4-PP-2																
5-Chloro-o-toluidine																MAM 41

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
Chlorophenyl fluorobenzene 14-53-3	1000	5320			300	5320			300	5320						
Chlorobenzene The chlorobenzene isomers 106-46-7	10	257			10	257			10	257			10	257		
3-Chloropropene 79-19-4	5	26			10	26			1	21	23.6		10	26	1	AAC 1 NCSN 1
2-Chloropropenoic Acid 100-18-1	10	244														
p-Chlorostyrene 1075-47-4	50	285	15	420	50	285	15	420	50	285	15	420				
m-Chlorostyrene 15-6-4	50	259			50	250			50	250	15	375				
2-Chloro-6-methoxy- methyl pyridine 1225-92-4		10	20		15	511			10	511	20					
Chloropyrene		2.2				2.2				2.2	0.6					
2,3,7,8-TCDF																
Chlorinated dibenzodioxins as Cr		2.36														MAX A2

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
Chromium hexafluoride 26-10-4 and compounds	0.35								0.001							MAX A2 NCSN 1
Chromium hexafluoride (Chromium), as Cr	0.35 A1															TLV A1
Chromium carbonyl 13007-92-6																AAC 3 MAX 6
Chromium (III) compounds, as Cr	0.5				0.5				0.5							
Chromium (III) compounds, as Cr	0.5				0.5				0.5							AAC 3 MAX A2
Chromium (VI) com- pounds, as Cr, water soluble	0.35								0.001							(PPE) AAC 1 MAX A2 NCSN 1
Chromium (VI) com- pounds, as Cr, water not soluble	0.05 A1								0.001							(PPE) AAC 1 NCSN 1 NTH 1
Chromium trioxide 1440-47-3	0.5								0.5							
Chromium trioxide, as Cr	0.05															AAC 1 MAX A2 NTH 2

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SUBSTANCE CAS #	ACGIH TLV		OSHA PEL		NIOSH REL		DPE MMSL		PEL	CARCINOGEN
	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING		
Cyclohexane	5		5		5					
111-92-4	5		5		5					
Cyclohexanone	15	200	15	200	15	200	15	200		
541-72-1	15	200	15	200	15	200	15	200		
Cyclohexanone	500	720	500	720	500	720				
107-72-3	500	720	500	720	500	720				
Cyclophosphamide										1, 2, 3 ARC NTP
50-18-3										
Cytarabine	5		5		5					
3121-75-5	5		5		5					
2,4-Dichlorophenoxyacetic acid	10		10		10		10	10	2	
541-75-1	10		10		10		10	10	2	
DOT Dichlorophenoxyacetic acid					15				11	1, 2, 3 ARC NTP
50-79-3			5		15		15	15	11	1, 2, 3 ARC NTP
Decabenzene										1, 2, 3 ARC NTP
1342-33-4										
Daunorubicin										1, 2, 3 ARC NTP
10830-81-1										

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMSL		PEL	CARCINOGEN
	Time		STEL/CEILING		Time		STEL/CEILING		Time		STEL/CEILING		Time	STEL/CEILING		
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³				
Decabenzene	0.35	0.25	0.15	0.15	0.05	0.2	0.15	0.8	0.05	0.2	0.15	0.8	0.35	0.25		
111-92-4	Skin				Skin				Skin				(H)			
Decylbenzene	-				-				0.5				0.8	-		
143-10-2	-				-				-				-			
Decylbenzene-methyl Methyl decylbenzene 9222-00-2	0.5		-		0.5		-		0.5		-		0.5	5	10	
Decylbenzene-methyl 1022-00-2	Skin (H)				Skin				Skin				(H)			
Decylbenzene-methyl 1005-48-3	0.01	0.11	-		0.1		-		0.1		-		0.01	0.1	10	
Decylbenzene-methyl 1005-48-3	Skin (H)				Skin				Skin				(H)			
Decylbenzene-methyl 4-methyl-4-methyl-2-pentene 73-42-2	50	230	-		50		240		50		240		50	240		
8,8-Dichlorooctane	-				-				-				-			ARC 10
613-35-4	-				-				-				-			
2,4-Dichlorophenoxyacetic acid	-				-				-				-			ARC 10 ARC 10 NTP 1
515-05-4	-				-				Ca. 10000 mg/m ³ (H)				-			
1,2-Dichloroethane 78-03-2	-				-				-				-			ARC 10
3,3-Dichloropropane	-				-				-				-			ARC 10
91-06-2	-				-				-				-			

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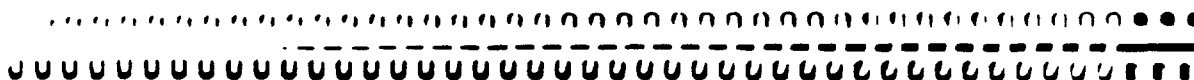
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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MASS		PEAK	CARCINOGEN
	TLV	STEL	CEIL	TLV	STEL	CEIL	TLV	STEL	CEIL	STEL	CEIL	TLV	STEL	CEIL		
1,2-Dichloro-3-chloropropene (DCEP) 75-31-1					100											ARC 18 HAB 42 N 25-1
1,2-Dichloroethane 107-06-2	42	42		10	100	10	100	100	100	100	100	100	100	100		ARC 18 HAB 42 N 25-1
2,4-Dichlorodinitrobenzene 121-91-8	2	4		2	4		2	4		2	4		2	4		
Dibutyl phosphite 111-95-4	1	3.5	2	1	5	2	10	5	2	10	5	2	10	5		
Dibutyl phenyl phosphite 1559-16-1	10	15														
Dibutyl stibinites 54-74-2	5			5			5			5						
Dichloroacetylene 1570-19-4	10	10	10	10	10	10	10	10	10	10	10	10	10	10		ARC 18 HAB 42 N 25-1
p-Dichlorobenzene 106-46-5	10	10	10	10	100	100	100	100	100	100	100	100	100	100		
p-Dichlorobenzene 106-46-5	10	10	10	10	100	100	100	100	100	100	100	100	100	100		ARC 18 HAB 42 N 25-1



SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MASS		PEAK	CARCINOGEN
	TLV	STEL	CEIL	TLV	STEL	CEIL	TLV	STEL	CEIL	STEL	CEIL	TLV	STEL	CEIL		
3,3-Dichlorobenzidine 91-34-1	42															ARC 18 HAB 42 N 25-1
1,4-Dichloro-2-butene 154-41-3	42	42	42													ARC 18 HAB 42
3,3-Dichloro-4,4'-diaminodiphenyl ether 15434-85-8	1															ARC 18
Dichlorodifluoromethane 75-71-8	100	1000		1000	1000		1000	1000		1000	1000		1000	1000		
1,3-Dichloro-5-bromobenzene 118-12-5	12		34	12		34	12		34	12		34				
1,1-Dichloroethene (vinylidene chloride) 75-34-3	100	400		100	400		100	400		100	400		100	400		(PAC)
1,2-Dichloroethane (ethylene dichloride) 107-06-2	10	40		1	4	2	8	1	4	2	8					ARC 18 HAB 42 N 25-1
Dichloromethane (methylene chloride) 75-72-8	5	20	20	1	4							2	8			ARC 18 HAB 42 N 25-1
1,2-Dichlorodifluoroethane (ACMURE) 540-59-0	200	100		200	100		200	100		200	100		200	100		

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE BASE		PLAC	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
Dimethylbenzene m-xylene 106-42-3	2				2				2				2			
Dimethyl ketone 108-10-8	25	45			25	50			25	50			50	90		
Dimethylamine 108-10-9	5	20			5	20			5	20						
3,3'-Dimethylbenzidine 3-Dimethylbenzidine 119-90-4																19A-42 ARC 19 19A-42 19A-42
Dimethylmethane Methane 75-08-15	1000	1000			1000	1000			1000	1000			1000	1000		
N,N-Dimethyl acetamide 127-19-3	2	10			10	15			10	15			10	15		
Dimethylamine 121-40-3	5	10	5	10	10	18			10	18			10	18		
4-Dimethylaminobenzene 50-11-7																19A-42 ARC 19 19A-42 19A-42
Dimethylamine- benzene 1,4-bis- 100-12-8	100	100			2	10			2	10			5	25		19A-42

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE BASE		PLAC	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
1,2-Dimethylamino- ethyl ether 3033-42-3																
1,2-Dimethylamino- ethyl ether (1,2-dimethyl- aminoethyl ether) 113-4-10-1																ARC 19
Dimethylamino- propane 113-28-6																
Dimethylamine N,N-Dimethylamine 121-40-3	5	25	10	50	5	25	10	50	5	25	10	50	5	25	10	ARC 19
Dimethylbenzene Xylene 106-42-3	100	425	150	651	100	425	150	651	100	425	150	651	100	425	10	
3,3'-Dimethylbenzidine 119-90-4																19A-42 ARC 19 19A-42 19A-42
Dimethyl carbamate 96-48-7	42	42														19A-42 ARC 19 19A-42 19A-42
1,2-Dimethyl-2,2- dimethylpropane 100-12-8	5				5				5				5		11	
Dimethyl ether 115-10-6													1000	1000		

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SUBSTANCE CAS #	ACGIH TLV		OSHA PEL		NIOSH REL		DFG MMS		PEAK	CARCINOGEN
	TLV ppm	STEL CEL/C	PEL ppm	STEL CEL/C	REL ppm	STEL CEL/C	MMS ppm			
N,N-Dimethyl-ethyl-amine 106-18-7							25	75		
Dimethylenetriamine 46-12-8	5	20	5	20	5	20	10	50		1A-2
2,2,6,6-Tetramethyl-4-piperidine 28-01-6	15	45	25	50	25	50	50	150		
1,1-Dimethylhydrazine 57-14-7	2.5 A2 NO 2.5 A2	2 A2 NO 2.5 A2	2.5	1	2.5	1	2.5	1		1A-2 A2 NO 2.5 A2 NO 2.5 A2
1,2-Dimethylhydrazine 540-79-8										1A-2 A2 NO 2.5 A2 NO 2.5 A2
N,N-Dimethylacetamide 127-19-3	42									1A-2 A2 NO 2.5 A2 NO 2.5 A2
Dimethylacetamide 127-19-3	5		5		5					1A-2
Dimethylsulfolane 107-99-9										1A-2
Dimethylsulfoxide 67-68-2										1A-2

SUBSTANCE CAS #	ACGIH TLV		OSHA PEL		NIOSH REL		DFG MMS		PEAK	CARCINOGEN
	TLV ppm	STEL CEL/C	PEL ppm	STEL CEL/C	REL ppm	STEL CEL/C	MMS ppm			
Dimethyl sulfoxide 67-68-2	2.5 A2 NO 2.5 A2	2 A2 NO 2.5 A2	2.5	1	2.5	1	2.5	1		1A-2 A2 NO 2.5 A2 NO 2.5 A2
Dimethyl sulfoxide 67-68-2	5		5		5					
Dimethyl sulfoxide 67-68-2	2.5	1	2.5	1	2.5	1				1A-2
Dimethyl sulfoxide 67-68-2	2.5 A2 CAS No 128-29-0 99-05-0 100-25-4	2 A2 CAS No 128-29-0 99-05-0 100-25-4	2.5	1	2.5	1				1A-2
Dimethyl sulfoxide 67-68-2	0.2		0.2		0.2		0.2			
Dimethyl sulfoxide 67-68-2	5		5		5					
Dimethyl sulfoxide 67-68-2	2.5 A2 NO 2.5 A2	2 A2 NO 2.5 A2	2.5	1	2.5	1				1A-2 A2 NO 2.5 A2 NO 2.5 A2
Dimethyl sulfoxide 67-68-2	25	30	25	30	25	30	50	100		1A-2 A2 NO 2.5 A2 NO 2.5 A2
Dimethyl sulfoxide 67-68-2	0.2		0.2		0.2					

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SUBSTANCE	ACSN FLV				OSHA PEL				NIOSH REL				OPE BANA		PEAE	CARCINOGEN
	TLV	TLV	STEL/CELCI		TLV	TLV	STEL/CELCI		TLV	TLV	STEL/CELCI		TLV	TLV		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Ethanol (Ethyl Alcohol) 75-26-1	25	10			35	10					205	213	25	10		
Ethanol (Ethyl Alcohol) 64-17-5	200	180			1000	900			1000	900			1000	900		
Ethanolamine 2 Aminoethanol 61-43-5	3	7.5	6	15	3	8	6	15	3	8	8	15	3	8	11.2	
Ethyl		0.4				0.4				0.4						
603-12-2		Stop				Stop				Stop						
2-Ethoxyethanol (Ethylene glycol monomethyl ether) 115-95-5	5	10			200	740			0.5	1.0			20	75	11.1	
2-Ethoxyethyl acetate (Ethylene glycol monoethyl ether acetate) 111-54-9	5	27			100	540			0.5	2.7			20	110	11.1	
Ethyl acetate 61-76-6	400	1440			400	1400			400	1400			400	1400		
Ethyl acetate (Ethyl Acetate) 140-88-5	5 A2	20 A2	15 A2	61 A2	5	20	25	100					5	20		
Ethyl acetate (Ethyl Acetate) 64-17-5	1000	1800			1000	1800			1000	1800			1000	1800		

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	CEIL	TLV	TLV	STEL	CEIL	TLV	TLV	STEL	CEIL	TLV	TLV		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Ethylene 15-50-1	1	1			1	1			1	1			1	1		
Ethyl acrylate (Ester, acrylate) 54-15-5	25	27			25	27			25	27						
Ethyl acetate 78-10-4	30	42	25	34	30	42	25	34	30	42	25	34	30	42		
Ethyl bromide (Bromide) 74-36-4	5	42	22	42	100	190	150	110					100	190		
Ethyl butyl acetate (Ester, acetate) 36-15-4	50	134			50	130			50	130						
Ethyl ether (Ether) 15-30-2	100	1540			100	1500										
Ethylene 74-85-1																
Ethylene dichloride (Chloride) 107-17-3			1	1.3			1	1.3			1	1.3				
Ethylenediamine (Amine, diamine) 107-15-3	10	25			10	25			10	25			10	25		

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	CEIL	TLV	TLV	STEL	CEIL	TLV	TLV	STEL	CEIL	TLV	TLV		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Ethylene dichloride (2-Chloroethane) 106-13-4	42	42			20	130	30	30	1	345	1	1				1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
Ethylene dichloride (2-Chloroethane) 107-08-2	10	40			1	4	2	8	1	4	2	8				1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
Ethylene glycol, Vapor 107-21-1			1	1.3			1	1.3					10	25		
Ethylene glycol diethers 125-05-4	105	0.31					0.1				0.1		0.05	0.3		
Ethylene glycol methyl ether acetate 2-butoxy- acetate 110-45-4	5	24			25	120			0.1	0.5			5	25		
Ethylene glycol mono- methyl ether 2-butoxy- acetate 111-75-2	25	121			25	120			5	24			25	100		
Ethylene glycol mono- methyl ether acetate 2-butoxy- acetate 112-07-2									5	31			25	120		
Ethylene glycol mono- methyl ether 2-butoxy- acetate 110-45-5	5	18			25	120			0.5	1.8			25	75		
Ethylene glycol mono- methyl ether acetate 2-butoxy- acetate 111-15-0	5	27			100	540			0.5	2.7			25	110		

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SUBSTANCE	ACSN TLVs				OSHA PELs				NIOSH PELs				OPE MMSs		PEAE	CARCINOGEN
	TWA		STEL/CEIL(C)		TWA		STEL/CEIL(C)		TWA		STEL/CEIL(C)		TWA			
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³				
Formic acid	5	9.4	12	18	5	9	-	-	5	9	-	-	5	9		
Ca 1-4																
Formic acid, ethyl (Ester Ethyl formate) 79-20-9	100	303	-	-	100	303	-	-	100	300	-	-	100	300		
														01		
Formic acid, methyl (Ester Methyl formate) 121-31-3	100	248	-	-	100	250	-	-	100	250	50	175	100	250	-	
														01		
2-(2-Formylvinyl)-2- (5-nor-2-ethyl) thiazole 1570-75-0																ARC 18
Formal	2	9	-	-	2	8	-	-	-	-	-	-	5	20	-	
30-31			Start	01			Start							101		
Formic acids	10	40	15	60	10	40	15	60	10	40	15	60	50	200		
30-30-0			Start				Start					Start				
Glycidyl ether												0.002				050-1
100 10-0												Ca 115-mg/m ³ PPE control				
10000	300	890	500	1480	300	900	500	1500								ARC 18 0-150-1
8075-41-9												Ca 100-15 ppm				
Germineum tri- hydride 1102-66-2	0.2	2.63	-	-	0.2	0.8	-	-	0.2	0.8	-	-				

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[illegible]

SUBSTANCE	ACSM FLVS				OSMA FLVS				MOEN FLVS				DPS BMSs		PEAS	LARC:BOGTN
	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C				
CAS#	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C	FLVS	STL:CEL/C		
Hexamethylenediamine	22				22				22							
123-07-1	22				22				22							
Hexamethylenediamine	22	2.66			0.1	0.7			0.1	0.7						
504-10-2	22				22				22							
Hexamethylenediamine	2008	0.034							2008	0.14			0.01	0.07		
522-08-0									110-mn 1000 mg				(3)			
Hexamethylenediamine	42	42														
680-31-9	22								Ca. 1000 mg							
Hexamine (N-Hexamine)	50	1.75			50	1.00			50	1.00			50	1.00	11.1	
110-50-3		(3)											(3)			
Hexamine, other members	500	1.70	1000	3000	500	1.000	1000	3000	100	300	C310	C1000				
1,8-Hexamethylenediamine	3.5	2.3														
124-00-4																
Hexamine	5	20			5	20			1	4			5	21	11.1	
110-50-3	201	70-8														
Hexamine	50	200	75	307	50	200	75	300	50	200	75	300	100	400	11.2	
100-10-1																

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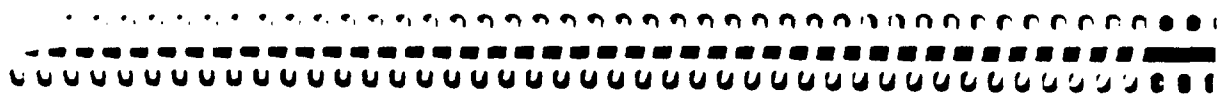
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 104

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SUBSTANCE CAS #	ACGIH TLV				OSHA PELs				NIOSH RELs				DPE MMS		PEAK	CARCINOGEN
	TLV	STEL	CEILING		TLV	STEL	CEILING		TLV	STEL	CEILING		TLV			
2-Hydroxypropyl methacrylate 99-47-1	2.5	2.5			2.5	3			2.5	3						
Monomer	See				See				See							
75-13-4	3	45			3	45			3	45						
Monomer 1,2,3-tris (pyrene)																
93-79-5																
Monomer 1,4-bis(4-ethyl-5-oxo-2-pentenyl) benzene	0.1				0.1				0.1							
Monomer		20	21			20	21			20	21		21			
153-56-2																
Monomer	2.6	0			2.6	10			2.6	10						
75-47-8																
Iron oxidation catalyst																
1004-66-4																
Iron oxide fume (Fe ₂ O ₃) as Fe 1309-37-1	5				5				5				5			
Iron pentacarbonyl as Fe 13463-40-6	0.1	0.8	3.2	1.6	0.1	0.8	3.2	1.6	0.1	0.8	3.2	1.6	0.1	0.8		



SUBSTANCE CAS #	ACGIH TLV				OSHA PELs				NIOSH RELs				DPE MMS		PEAK	CARCINOGEN
	TLV	STEL	CEILING		TLV	STEL	CEILING		TLV	STEL	CEILING		TLV			
Iron oxide, soluble, as Fe																
Monomer	100	532			100	525			100	525						
23-92-2																
Monomer	100	361	125	452	100	360	125	450	100	360	125	450	100	360	11	
23-51-3																
Monomer	50	713			50	700			50	700						
115-19-0																
Monomer	50	152			50	150			50	150						
75-43-1																
Monomer													5	15	11	
75-01-9																
Monomer									8	22						
75-02-0																
Monomer	50	260			50	270			50	270						
29952-21-4		See				See				See						
Monomer		25	220		4	23			4	23			5	25		
75-50-1																

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SUBSTANCE CAS #	ACGIH TLV		OSHA PEL		NIOSH REL		DPE BASE		PEAK	CARCINOGEN
	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING		
Lead phosphate 1317-37-7	0.5		0.25		0.1					1A
			See 29 CFR 1910.102		See 29 CFR 1910.102					
Limestone Calcium carbonate 1317-65-3	1		1		1					
			Total dust	Respirable fraction	Total dust	Respirable fraction				
Lithium hexafluoroarsenate 58-39-3	0.5		0.5		0.5		0.5			1A
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			
Lithium hydride 7540-67-8	0.025		0.025		0.025		0.025			
L.P.G. Liquefied petroleum gas 44-79-5	100	100	100	100	100	100				
Magenta manufacture 570-39-3										1A
Magnesium 1317-60-3	1		1		1					
			Total dust	Respirable fraction	Total dust	Respirable fraction				
Magnesium oxide 1317-68-4										
Magnesium sesquioxide 1317-68-4	1		1		1					
			Total dust	Respirable fraction	Total dust	Respirable fraction				

SUBSTANCE CAS #	ACGIH TLV		OSHA PEL		NIOSH REL		DPE BASE		PEAK	CARCINOGEN
	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING	TLV	STEL/CEILING		
Malathion 121-75-5	0		0.5		0		0			1A
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			
Maleic anhydride 108-31-6	0.25	1	0.25	1	0.25	1	0.1	1		
Maleonitrile 109-17-3										
Manganese elemental 1317-60-3 & manganese compounds, as Mn 1317-60-3	(5)			5		3	5		(H)	(P+O)
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			
Manganese fume, as Mn 1317-60-3	(1)	10		3		3	5		(H)	(P+O)
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			
Manganese hypophosphite 1317-60-3	0.1		0.1		0.1		1		(H)	
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			
Manganese sesquioxide as Mn 1317-60-3							1		(H)	
Metallic sodium 7440-20-2							1			1A
Methyl Calcium carbide 1317-60-3	10		10		10					
	See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102		See 29 CFR 1910.102			

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
2-Methoxy-1-propanol 109-47-5													10	5		
2-Methoxypropyl-1- acetate 115-77-0													10	5		
Methyl acetate 75-57-3	100	500	250	157	100	510	250	157	100	510	250	160	100	510		
Methyl acrylate 96-33-7	100	500			100	500			100	500			100	500		
Methyl acetate-propyl acetate mixture 1:1	100	500	250	150	100	500	250	150	100	500	250	150				
Methyl acrylate 96-33-7	10	15			10	15			10	15			5	8		
Methyl isobutyrate 110-54-0		500				500				500				5		
Methyl isobutyrate 110-54-0		20				20				20						
Methyl isobutyrate 110-54-0		500				500				500						
Methyl isobutyrate 110-54-0	100	100			100	100			100	100			100	100		
Methyl isobutyrate 110-54-0	100	150	250	125	100	150	250	125	100	150	250	125	100	150		
Methyl isobutyrate 110-54-0		500				500				500				5		

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DGC MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
Methylamine 74-89-5	5	6.4	5	19	10	12			10	12			10	12		
Methyl amyl alcohol Methyl amyl alcohol 100-41-8	25	104	40	167	25	100	40	166	25	100	40	166	25	100	11.2	
Methyl n-amyl alcohol 110-43-0	50	233			100	466			100	466						
Methyl alcohol Methyl alcohol 100-41-8	0.5	2.2			0.5	2			0.5	2			0.5	2	11.1	
2-Methoxypropane Propylene ether 75-55-8	2.42	4.742			2	5			2	5						ARC 1 ARC 2 ARC 3 ARC 4
Methyl isobutyrate 110-54-0																ARC 2
Methyl isobutyrate 110-54-0																ARC 2
Methyl isobutyrate 110-54-0	5	19			5	20							5	20	11.1	ARC 3 ARC 4 ARC 5
Methyl n-butyl alcohol 91-76-4																

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV		
4-Methyl Cellulose [Methylcellulose] 79-46-4	5	5			25	50			25	25			5	5		
			San			San				San				5		
Methyl Cellulose Acetate [Methylcellulose acetate] 101-43-6	5	24			25	20			25	25			5	25		
			San			San				San				5		
Methyl chlorides [Methyl chloride] 74-87-3	50	25	100	207	50	100	100	200					50	25		PA AC MMS-1
			San											5		
4-Methyl-bis(2-chloroethyl) amine [Methylbis(2-chloroethyl)amine] 101-75-2																
Methyl chloroform [1,1,1-Trichloroethane] 71-43-4	150	300	450	240	150	300	450	240	150	300			200	200		PA AC
5-Methylcrysene																
Methyl 2-cyanoacrylate [Methyl 2-cyanoacrylate] 127-41-2	2	2	4	8	2	5	4	5	2	5	4	5	2	5		
Methylcyclohexane	100	500			100	500			100	500			500	1000		
Methylcyclohexane	50	224			50	225			50	225			50	225		

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DFG MMS		PEAK	CARCINOGEN
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV		
6-Methylcyclohexanone	50	229	75	344	50	230	75	345	50	230	75	345	50	230		
			San				San									
7-Methylcyclohexanone manganese trisulfide [Methylcyclohexanone] 50-68-1	22				0.2				0.2							
			San				San									
Methyl cyanide	0.5				0.5				0.5				0.5	5		
			San (0)				San									
Methylene bis(2-chloroethyl) ether [Methylene bis(2-chloroethyl) ether] 101-40-8	0.05	0.05							0.05	0.05	0.05	0.20				
Methylene chloride [Dichloromethane] 75-70-2	50 A2	174 A2			50B								100	200		PA AC MMS-1
4,4'-Methylene bis(2-chlorophenyl) ether [4,4'-Methylene bis(2-chlorophenyl) ether] 101-14-4	0.02 A2	0.22 A2			0.02	0.22			0.02							PA AC MMS-1
			San (0)				San									
Methylene bis(4-cyclohexylmethyl) ether [Methylene bis(4-cyclohexylmethyl) ether] 101-77-4	0.20	0.05														
4,4'-Methylene bis(2-chlorophenyl) ether [4,4'-Methylene bis(2-chlorophenyl) ether] 101-14-4	0.02 A2	0.22 A2			0.02	0.22			0.02							PA AC MMS-1
			San (0)				San									

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SUBSTANCE	ACSN TELU				OSHA PELs				NIOSH PELs				DPE MMSs				PLMS	CARCINOGEN
	TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)			
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Methyl isobutyl ketone	50	225	75	307	50	205	75	300	50	205	75	300	100	400		11.2		
10-10-1																		
Methyl isobutanol	132	304.7			0.02	0.05			0.02	3.05			3.01	3.025		1		
524-42-4		Stop				Stop				Stop				(C) (S)				
Methyl isobutyl ketone	200	705			200	705			200	705								
563-40-4																		
Methyl isobutyl ketone	3.5	0.95			0.5	1				0.5	1		0.5	1		1		
14-03-1										115-min TLV ceiling								
Methyl isobutyl ketone	100	410			100	410			100	410			50	210		1	ARC 1	
50-42-4														(C) (S)				
Methyl isobutyl ketone																	ARC 25 679-2	
66-27-3																		
2-Methyl-1-propanethiol																	ARC 25	
75-15-7																		
Methyl isobutyl ketone																	PA 62 ARC 25 679-2	
70-25-7																		
Methyl isobutyl ketone	0.2				0.2				0.2								ARC 1	
70-25-7		Stop				Stop				Stop								

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5. 3242

[illegible]

SUBSTANCE	ACOSH TLV				OSHA PEL				NIOSH REL				DSE MARK		PELW	CARCINOGEN
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV		
Methylene chloride 75-71-7	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Meth	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
200-75-2	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methylene chloride	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
50-54-8	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methylene chloride	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
75-71-7	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methylene C	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
50-57-7	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methylene "475-55-7" Soluble compounds as the	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methylene "475-55-7" Soluble compounds as the	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
Methoxybenzene C ₆ H ₅ OC ₂ H ₅ 75-55-8	100	100	100	100	100	100	100	100	100	100	100	100	100	100		

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEAS	CANC NOGEN
	TLV	STEL	CEIL	C	TLV	STEL	CEIL	C	TLV	STEL	CEIL	C	TLV	STEL		
1,5-Dichlorobenzene 106-46-5																
4-Nitro-2-Nitrophenol 520-27-6																
Nitrogen																
Nitrogen dioxide	1	5	5	5												
Nitrogen mustard																
Nitrogen mustard Nitrogen mustard Nitrogen mustard																
Nitrogen trichloride	1	10			1	10			1	10						
Nitrobenzene	100-51-6												100	100		
Nitromethane	100-50-7				10	250							30	250		

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PEAS	CANC NOGEN
	TLV	STEL	CEIL	C	TLV	STEL	CEIL	C	TLV	STEL	CEIL	C	TLV	STEL		
1-Nitrobenzene																
2-Nitrobenzene																
3-Nitrobenzene																
4-Nitrobenzene																
5-Nitrobenzene																
6-Nitrobenzene																
7-Nitrobenzene																
8-Nitrobenzene																
9-Nitrobenzene																
10-Nitrobenzene																
11-Nitrobenzene																
12-Nitrobenzene																
13-Nitrobenzene																
14-Nitrobenzene																
15-Nitrobenzene																
16-Nitrobenzene																
17-Nitrobenzene																
18-Nitrobenzene																
19-Nitrobenzene																
20-Nitrobenzene																

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SUBSTANCE	ACGIH TLV		OSHA PEL		NIOSH REL		DFG MARK		PEAK	CARCINOGEN
	TLV	STEL CEILING	TLV	STEL CEILING	TLV	STEL CEILING	TLV	STEL CEILING		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
4-Nitrophenylamine NCEA 55-85-5										19-32 ARC 19 MMS 42 NTP 2
4-Nitrodimethylamine	42									19-32 ARC 19 MMS 42 NTP 2
52-75-9	500	Sum	20-500 20 CFR 1910.106		20-500 20 CFR 1910.106					19-32 ARC 19 MMS 42 NTP 2
6-Nitrodimethylamine										ARC 19
56-72-5										
4-Nitrodimethylamine										MMS 42
57-77-4										
4-Nitrodi-n-propylamine NCPA 52-74-7										19-32 ARC 19 MMS 42 NTP 2
4-Nitrodimethylamine										MMS 42
5-75-5										
4-Nitrodi-n-octylamine										19-32 ARC 19 NTP 2
719-77-3										
4-Nitrodimethylamine										19-32 ARC 19 MMS 42 NTP 2
7585-95-6										
4-Nitrodimethylamine										MMS 42
5-75-5										

SUBSTANCE	ACGIH TLV		OSHA PEL		NIOSH REL		DFG MARK		PEAK	CARCINOGEN
	TLV	STEL CEILING	TLV	STEL CEILING	TLV	STEL CEILING	TLV	STEL CEILING		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
4-Nitrodi-n-octylamine NCEA 564-73-5										19-32 ARC 19 NTP 2
4-Nitrodimethylamine NCEA 1256-13-6										NTP 2
4-Nitrodimethylamine NCEA 53-98-2										ARC 19 MMS 42 NTP 2
4-Nitrodimethylamine NCEA 6543-55-6										ARC 19 NTP 2
4-Nitrodimethylamine NCEA 70-73-4										19-32 ARC 19 MMS 42 NTP 2
4-Nitrodimethylamine NCEA 730-55-2										19-32 ARC 19 MMS 42 NTP 2
4-Nitrodimethylamine NCEA 1256-72-9										ARC 19 NTP 2
4-Nitrodi-n-octylamine	2	11	2	11	2	11	5	30	11	
55-72-2	Sum 61		Sum		Sum					
4-Nitrodi-n-octylamine	2	11	2	11	2	11	5	30	11	
79-75-1	Sum 61		Sum		Sum					

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SUBSTANCE	ACSM TLV				OSHA PEL				NIOSH REL				OFG MMS		PEEL	CARCINOGEN
	TLV		STEL/CEILING		PEL		STEL/CEILING		REL		STEL/CEILING		MMS			
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Nitrobenzene 0-1000	2	10			2	10			2	10			5	20		
95-20-2	See 20-2				See 20-2				See 20-2				See 20-2			
Nitrobenzene all isomers 12-12-6													5	20		
Nitrobenzenesulfonic Chloride 15-15-2	2	10	2	10	2	10	2	10	2	10	2	10	2	10		
Nitrobenzene 50-30	50	30							25	20						
1024-97-2					Some Assumptions: 100% pure											
Nitrobenzene 100-150	100	150			100	150			100	150						
111-54-2																
N-Nitrosodimethylaniline 115-21-6									1.5	1.3						
115-21-6									1.5 mg/m ³ TWA ceiling							
Nitrobenzene Particulates Not Covered by the OSHA 15-15-2	10				15	15										
15-15-2	10				15				15							
Octachlorodiphenyl ether 100-100-100	2		2		2		2		2		2					
100-100-100	See 100-100-100				See 100-100-100				See 100-100-100							
Octachlorodiphenyl ether 100-100-100									1.5	1.3						
100-100-100									1.5 mg/m ³ TWA ceiling							

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE HAAS		PEAS	CARCINOGEN
	TLV	STEL	CEILING	REL	TLV	STEL	CEILING	REL	TLV	STEL	CEILING	REL	TLV	STEL		
vinylchloride																
107-17-3																
Oron		0.1	0.10		0.1	0.2	0.2	0.1		0.1	0.1		0.1	0.1		
1000-1-4																
Perfluoro S																
TM 93-4																
Perfluoro ethyl	2				2				2							
1002-1-0																
Perfluoro	0.5				0.1				0.1				0.1			
1445-1-1	0.1				See Respiratory Prot				See Respiratory Prot				0.1			
Perfluoro	0				0.1				0.05				0.1			
50-10-0	See 10				See 10				See 10				0.05			
Perfluoro polyether from hydrocarbons from 1000-1-4	0.04				0.2				0.1							
1000-1-4									See Occupational Exposure Limitation							
Particulates Not Otherwise Classified - PROC	0				5	5										
	0				Total dust	Respiratory Protection										
Perfluoro	0.05	0.1	0.15	0.10	0.05	0.1	0.15	0.10	0.05	0.1	0.15	0.10	0.05	0.1		
1445-1-1																

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE HAAS		PEAS	CARCINOGEN
	TLV	STEL	CEILING	REL	TLV	STEL	CEILING	REL	TLV	STEL	CEILING	REL	TLV	STEL		
Perfluorobenzene													5	40	1	(P+D) ARC 1 NCS 1
15-11-7									Handle with Caution							
Perfluorooxiphenyl	0.5				0.5				0.5				0.5		1.2	
122-64-8	See 10				See 10				See 10				GI (H)			
Perfluorooxiphenyl 12-66-8	0.5															(P+D) ARC 2
Perfluorooxiphenyl	0.5				0.5				0.5						III	(P+D) ARC 2 NCS 2
67-66-6	See 10				See 10				See 10				GI (H)			
Perfluorobenzene	10				10 ⁵ 5 ¹¹				10 ⁵ 5 ¹¹							
115-77-5					Total dust	Respiratory Protection			Total dust	Respiratory Protection						
Perfluoro	600	1700	750	2210	600	1800	750	2250	120	360	610 ¹¹	1650 ¹¹	1000	2800	1	IV
100-66-0									115-min Time ceiling							
2-Perfluoro Methyl ether (MPE)	200	700	250	601	200	700	250	675	150	530			200	700	11.1	
107-47-6																
Perfluorobenzene									0.5	2.1						
115-66-7									115-min Time ceiling							
Perfluorobenzene 1,1,1,2,2,2-hexafluoro- ethane (HFE)	501 100-51-3	1330 170-43	200 100-43	1337 600-43	25 170								50	340	11.1	(P+D) ARC 2 NCS 1 11.1
127-18-4									Ca. avoid known conf. (LOD 0.4 ppm)							

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPS MMS		PEAK	CARCINOGEN
	TLV	STEL	CEILING	TLV	STEL	CEILING	TLV	STEL	CEILING	STEL	CEILING	TLV	STEL	CEILING		
Phenyl ether biphenyl mixture (60-61-7)																
Phenyl ethylene biphenyl monomer 70-42-5	50	215	30	425	50	215	30	425	50	215	30	425	50	15		1
Phenyl glycidyl ether AGE 101-50-1		6				6				15-min TWA ceiling				5		2
Phenylhydrazine 70-53-0	21.42	214.2			5	20	10	45		21.4	214		5	22		2
Phenyl methanone 108-28-5	2.5	2.5			2.5	2				20-min TWA ceiling				5		
2-Phenyl-2-azobenzothiazole 115-56-6										15-min TWA ceiling						2
Phenylphosphine 438-21-1		10.25	10.25			10.25	10.25				10.25	10.25				
Phenylol (= sodium salt) 57-41-0																2
Phenol 70-52-2		2.25	2.2			2.25	2.2			2.25	2.2					1

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPS MMS		PEAK	CARCINOGEN
	TLV	STEL	CEILING	TLV	STEL	CEILING	TLV	STEL	CEILING	STEL	CEILING	TLV	STEL	CEILING		
Phosphor bromine 115-34-7	2.21	2.22	2.23	2.27	0.1	0.1	0.03	0.3	2.21	0.1	0.03	0.3	2.01	0.1		
Phosphorus chlorine 75-44-5	0.1	0.4			0.1	0.4			0.1	0.4	0.2	0.8	0.1	0.4		
Phosphorus 7803-51-2	2.2	0.42	1	1.4	0.3	0.4	1	1	0.3	0.4	1	1	0.1	0.15		
Phosphorus acid 1364-38-2		1		3		1		3		1		3				
Phosphorus (yellow) 7723-14-0	0.02	0.1			0.1				0.1				0.1			
Phosphorus tri- oxide 13023-07-3	0.1	0.63			0.1	0.6			0.1	0.6	0.3	3	0.2	1	10	
Phosphorus pent- oxide 1320-12-8	0.1	0.65				1				1						
Asphoric pentoxide																
Phosphorus pent- sulfide 1314-80-3		1		3		1		3		1		3		1		

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SUBSTANCE	ACSM REL				OSHA REL				NIOSH REL				DPS REL		PLAS	LACROGER
	TMS		STEL CEL(C)		TMS		STEL CEL(C)		TMS		STEL CEL(C)		TMS			
	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Phosphorus trichloride	0.2	1.1	0.5	2.8	0.2	5	0.5	3	0.2	5	0.5	3	0.5	1		
Phosgene		5	1			5				5			5			
55-60													0.5	5		
Phosphoric acid		5				5				5			5			
525-75													0.5	5		
Picric acid		0				0.5										
19-8 72-1					Total dust - Respirable fraction											
Picric acid		0.1				0.1				0.1	0.3		0.1			
58 99-1						5				5			0.1			
Pindone		0.1				0.1				0.1						
52 78-1																
Piperazine dihydrochloride		5				5				5						
12-54 3																
2-Pyrimidin-5-ol		0				0.1				0						
92 28-1																
Plaster of Paris		0				0.5				0.5			5			
Calcium sulfate 154-99-53-0					Total dust - Respirable fraction					Total dust - Respirable fraction						

SUBSTANCE	ACORN TLVs				OSHA PELs				NIOSH RELs				DPE REAGs		PLANS	CANCINOGLS
	TLV	STEL/CEIL/C	TLV	STEL/CEIL/C	TLV	STEL/CEIL/C	TLV	STEL/CEIL/C	TLV	STEL/CEIL/C	TLV	STEL/CEIL/C				
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
PLATINUM, MOON													2.002			
*440-28-4													(G) (S)			
PICRIC ACID													2.002			
SALT, IN PI													2.002			
*440-08-4													(G) (S)			
POLYMERIZED BOHAYE, PDS																ARC 70 170-2
POLYMERIZED BOHAYE (PCBS)																174-02 ARC 1A 170-2
*133-35-3																
POLYMERIZED CHLOROPHYS-47% 54%																166-4 1600-4
POLYMERIZED DECOMPOSITION PRODUCT																
POLYMERIZED																
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SUBSTANCE CAS #	ACOSH TLV				OSHA PEL				NIOSH REL				DPE BAA		PLAC	CARCINOGEN
	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	
Propanol isopropyl 107-15-3				22				22				22				
Precipitated silica Silica amorphous 7632-08-4	5				5				5				4			
Propanediol 57-15-3																ARC 3 NCS-4
Propanediol hydrochloride 366-70-1																ARC 3 NCS-4
Propylene (isobutyl)																ARC 3 NCS-4
Propane 74-84-4					1000	800			1000	800			1000	800		
Propane sulfone 1120-17-4	42	42							Ca. upper flammable limit							ARC 3 NCS-4 NCS-5
Propargyl alcohol 107-19-7	2.2				2				2				2	5		
Propylene 57-15-3	1.5-42	1.5-42														ARC 3 NCS-4 NCS-5

SUBSTANCE CAS #	ACOSH TLV				OSHA PEL				NIOSH REL				DPE BAA		PLAC	CARCINOGEN
	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	STEL/CEILING	TLV	ppm	mg/m ³	
Propionic acid 79-59-4	10	30			10	30			10	30	15	45	10	30		
Propionitrile 107-12-0									6	14						
Propionic (Saponin) 114-26-1	0.5				0.5				0.5				2			
n-Propyl acetate 109-60-4	200	620	230	1040	200	640	230	1060	200	640	250	1060	200	640		
n-Propyl alcohol 11-23-4	200	480	230	614	200	500	230	620	200	500	250	620				
Propylene 57-15-3																ARC 3
Propylene dichloride 78-87-3	75	347	110	500	75	300	110	510					75	300	112	ARC 3 NCS-4
Propylene glycol 3423-43-4	1.00	0.34			0.05	0.1			0.05	0.1			0.05	0.1		
Propylene glycol-1-methyl ether-2-oxirane 108-66-6													50	275		

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE HAAS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Propylene glycol monomethyl ether 107-11-2	30	200	50	553	20	160	50	540	20	160	50	540	20	175		
Propylene nitrate 2-methyl-2-nitro-1-propanol 75-55-8	1.42	1.42			2	5			2	5						CA 12 CA 13 CA 14 CA 15
Propylene oxide	20	48			20	50										ARC 1A ARC 1B ARC 1C ARC 1D
75-56-9									Ca. over 100,000 conc. 1,000 ft. 100 ft.							
n-Propylmercaptan									10.5	21.6						
107-12-9																
n-Propyl nitrate	25	107	40	172	25	108	40	170	25	108	40	170	25	110		
527-13-4			81													
Propylthiouracil																ARC 1 ARC 2
57-12-5																
Propylene nitrate acrylate 74-98-7	300	640			300	650			300	150			300	650		
PVC													5			
3002-89-2																
Pyridine		5				5				5			5		II	
3003-34-7													5	51		

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE HAAS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV	STEL/CEIL(C)		TLV	TLV		
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³		
Pyridine	5	16			5	15			5	15			5	15	II	
115-85-1																
Pyridine (Carcin)	5	23			5	20			5	20						
120-80-9					Stop				Stop							
Quartz Silica-Cristobalite 1480-45-7		0.1				0.1				0.05				0.15		ARC 1A ARC 1B ARC 1C ARC 1D
			10			Respirable dust				Respirable dust				(1)		
Quartz	0.1	0.44			0.1	0.4			0.1	0.4			0.1	0.4	I	ARC 1
120-51-4																
RDX (Carcin)		1.5				1.5				1.5		3				
121-62-4			Stop			Stop				Stop						
Resorcinol																ARC 1 ARC 2
50-56-5																
Resorcinol	10	46	20	99	10	46	20	99	10	46	20	99				ARC 1
108-45-3																
Van. Nitro		1				0.1				0.1						
140-10-6																
Rhodamine, insoluble compounds, as Pb		1				0.1				0.1						

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SUBSTANCE	ACSH FLV		OSHA PEL		NIOSH REL		OPE MASS		PEAK	CARCINOGEN
	FW	STEL/CEIL(C)	FW	STEL/CEIL(C)	FW	STEL/CEIL(C)	FW	STEL/CEIL(C)		
CAS #	gms	mg/m ³	gms	mg/m ³	gms	mg/m ³	gms	mg/m ³		
Selenium **EC 49-21 and compounds as Se	12		0.2		12		2.1		11	ARC 1
				Selenium compounds				GI		
Selenium hexa- fluoride as Se **EC 79-1	238	239	0.05	0.4	205	2.4				ARC 1
Selenium sulfide										EC-02 ARC 3 OTF-2
**CAS 24-6										
Selenium Cryogenic **EC 79-7	10		10 ⁻⁵	5 ⁻¹	10 ⁻⁵	5 ⁻¹				
				**Toxic dust **Respirable fraction		**Toxic dust **Respirable fraction				
Silane Silane tetrafluoride **EC 42-5	5	6.6	5	7	5	7				
Silica-Amorphous Orthosilicic acid (amorphous) **EC 43-2	10		6		6		4			ARC 1
		101						(G)		
Silica-Amorphous Pyrogenic silica **EC 43-4	10		6		6		4			ARC 1
		81						GI		
Silica-Amorphous fume **EC 43-2	2						0.3			ARC 1
		13						(F)		
Silica-Amorphous Silica fume EC 79-05-0	0.1		0.1		0.05		3.3			ARC 1 NIOSH 1
		13		**Respirable dust REL-Crystalline Silica		Ca. **Respirable dust REL-Crystalline Silica		(F) CAS 7909-61-41		

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MARK		PLAC	CARCINOGEN
	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)		
Silica-Amorphous Silica gel 11729-30-8	10				5				5				4			ARC
Silica-Crystalline Cristobalite 1480-22-4	0.25				0.25				0.25				0.5			ARC N1 N2
Silica-Crystalline Quartz 1480-40-7	0.1				0.1				0.25				0.5			ARC N1 N2
Silica-Crystalline Tridymite 1480-22-3	0.25				0.25				0.25				0.5			ARC N1 N2
Silica-Crystalline Trigonal 1317-95-9	0.1				0.1				0.25				0.5			ARC N1 N2
Silica fume S-carbamoyl 590-154-2	2												0.3			ARC
Silica fume S-carbamoyl 508-98-0	0.1				0.1				0.25				0.3			ARC N1 N2
Silica gel S-carbamoyl 11729-30-8	10				5				5				4			ARC
Silica precipitated S-carbamoyl 11729-30-8	0				5				5				4			ARC

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MARK		PLAC	CARCINOGEN
	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)	TLV	STEL/CEIL(C)		
Silica acid, unhydrated (low silica) 18-79-4													20	170		
Silicon 1460-21-3	10				10 ⁶ 5 ¹¹				10 ⁶ 5 ¹¹							
Silicon carbide 409-21-2	10				10 ⁶ 5 ¹¹				10 ⁶ 5 ¹¹				4			
Silicon nitride 1303-42-5	5	6.6			5	7			5	7						
Silver, metal 1440-22-4	0.1				0.01				0.01				0.01			
Silver, soluble com- pounds, as Ag	0.01				0.01				0.01				0.01			
Selenium 7802-22-8	0.3				0.3				0.3							
Selenium dioxide 1317-95-9	0.1				0.1				0.1				0.07	0.2		

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SUBSTANCE	ACGM TLV				OSHA PEL				NIOSH REL				OPE MMS		PEL	CARCINOGEN
	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	
Sulfur dioxide	2	5.2	5	13	2	5	5	13	2	5	5	13	2	5		
See 10-1																
Sulfur hexafluoride	100	500			100	500			100	500			100	500		
See 12-4																
Sulfuric acid				1												
See 13-9																
Sulfur monochloride			0.1	0.3			0.1	0.3			0.1	0.3		0.1	0.3	
See 15-9																
Sulfur pentachloride			0.01	0.03			0.01	0.03			0.01	0.03		0.01	0.03	
See 12-7																
Sulfur tetrachloride			0.1	0.4			0.1	0.4			0.1	0.4				
See 12-3																
Sulfuryl fluoride	5	21	12	42	5	20	10	40	5	20	10	40				
See 13-8																
Synthetic																
See 12-2																
Synthetic	0.01	0.01			0.1				1				0.01	0.01		
See 12-1			See 12-1		See 12-1				See 12-1				See 12-1			

SUBSTANCE	ACGM TLV				OSHA PEL				NIOSH REL				OPE MMS		PEL	CARCINOGEN
	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	STEL/CEIL(C)	TLV	ppm	mg/m ³	
2,4,5-T (2,4,5-trichlorophenoxyacetic acid) (C-75-1)	10				10				10				10		11.2	
															(G, H)	
Talc (containing no asbestos fibers)	2				2				2				2			ARC 1
See 12-4					Respirable dust				Respirable dust				(P)			
Talc (containing asbestos fibers)									Ca. 100 000 mg/m ³ / 10 > 5 µm diam. ASD max exposure							ARC 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
See 12-4					See 29 CFR 1910.1001											
Tellurium, metal	5				5				5		10		5		10	
See 25-7													(G)			
Tellurium, oxide dust	5				5				5		10					
See 14-10																
TEMP	0.2				0.2				0.2				0.015	0.2	18	
See 12-1					See 12-1				See 12-1				(H)			
Tellurium (2,4,5-Cl-4) & compounds, as Te	0.1				0.1				0.1				0.1		11.2	
													(G)			
See 12-1	0.02	0.2			0.02	0.2			0.02	0.2						
See 12-1																
Tellurium	10				10				10							
See 12-1					See 12-1				See 12-1							
See 12-1					See 12-1				See 12-1							

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SUBSTANCE	ACID FLU				ORIN FLU				ORIN REL				SPE BARS		PEAK	CARCINOGEN
	TIME	STEL/CBL(C)	TIME	STEL/CBL(C)	TIME	STEL/CBL(C)	TIME	STEL/CBL(C)	TIME	STEL/CBL(C)						
CAS #	min	mg/m ³	min	mg/m ³	min	mg/m ³	min	mg/m ³	min	mg/m ³	min	mg/m ³	min	mg/m ³		
Tetrahydrofuran Carcinogenic 56-23-5	5 A2	31 A2			2	12.6				2	12.6		18	66	11.1	ARC 1B MSB 8 NCS-4 N75.2
Tetrahydrofuran		Sum							2	60-min STEL				0.1 M		
Tetrahydrofuran		2				2			2							
75-35-2						Sum				Sum						
Tetrahydrofuran, 20 Pp		0.1				0.075				0.075			0.07	0.075	11.1	ARC 1
75-35-2		Sum res				Sum				Sum				1M		
Tetrahydrofuran (20% max)													100	400		
75-35-2																
Tetrahydrofuran	200	500	250	737	200	500	250	736	200	500	250	730	200	500	11.2	
75-35-2														1C		
Tetrahydrofuran, 20 Pp		0.18				0.075				0.075			0.07	0.075	11.1	ARC 1
75-35-2		Sum res				Sum				Sum				1M		
Tetrahydrofuran 2500-32-6	0.5	2.0			0.5	3			0.5	3			0.5	3	11.1	
2500-32-6		Sum				Sum				Sum				1M		
Tetrahydrofuran		11	41			1	8			1	8					MSB 8
500-10-6		MC-4 001 A2 134 A2														
Tetrahydrofuran pyrophosphate 75-35-2		5				5				5						

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SUBSTANCE	ACORN TLW				OSMA PLS				NOSH RELS				OPS MARK		PLAS	CARCINOGEN	
	TMS	STEL/CEU(G)			TMS	STEL/CEU(G)			TMS	STEL/CEU(G)			TMS	mg/m ³			
CAS #	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³			
Thiourea dioxide																"P"	
Tin. Metal		2				2											
7440-31-5																	
Tin. Oxide & organotin compounds, except SnCl ₄ , as Sn		2				2								2	"I"		
Tin. Organic compounds, as Sn		0.1		0.2		0.1								0.1	"I"		
		Stop				Stop								(G) (H)			
Tin oxide, as Sn		2				2								2	"I"		
21681-19-4															(G)		
Thiourea dioxide		10				10* "I"								6		AEC 3 MCS-1	
13453-47-7		01				**Toss dust **Respirator protection								Ca must wear cap. 1.00 g/m ³	(F)		
p-Toluidine	42	42												0.02* SD-max TWA ceiling Ca		AEC 1B MCS-1 MCS-1 MCS-1	
114-03-7		Stop															
Iron-colored dyes																MCS-1	
														Ca. minimum exposure			
Toluene, Toluol	50	147				100	375	150	500		100	375	150	500	100	300	"I" 2
108-90-3		Stop (0)													(0)		"A" C AEC 3

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SUBSTANCE	ACGM TLV				OSHA PEL				NIOSH REL				DPE CLASS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV		
130																
1,4-dioxane (2,4-dichlorodioxane) 35-50-7																ARC IARC NTP
1,4-dioxane 101-07-1	1.05	1.05	1.22	1.4	1.05	1.05	1.22	1.5					1.21	1.27		ARC IARC NTP
1,4-dioxane 35-50-7									Ca. Reduce exp. to avoid TMS LPH				51			ARC IARC NTP
1,4-dioxane 101-07-1													1.21	1.27		ARC IARC NTP
1,4-dioxane 35-50-7									Ca. Reduce exp. to avoid TMS LPH				51			ARC IARC NTP
1,4-dioxane 101-07-1	2.42	2.42			5	22										ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Reduce exp. to avoid TMS LPH				See 81			ARC IARC NTP
1,4-dioxane 101-07-1	2	2			2	9										
1,4-dioxane 35-50-7			See 81			See 81										
1,4-dioxane 101-07-1	2.42	2.42			2	9										ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Limit exp. to 100 mg/m ³ See 81				See 81			ARC IARC NTP
1,4-dioxane 101-07-1																ARC IARC NTP
1,4-dioxane 35-50-7																
1,4-dioxane 101-07-1	10	10	150	165	20	275	150	160	20	275	50	160	20	280		
1,4-dioxane 35-50-7			51										51			
1,4-dioxane 101-07-1	1.5				1.5								1.5			ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Limit exp. to 100 mg/m ³ See 81				See 81			ARC IARC NTP

SUBSTANCE	ACGM TLV				OSHA PEL				NIOSH REL				DPE CLASS		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV	STEL/CEILING	TLV	TLV	TLV		
130																
1,4-dioxane (2,4-dichlorodioxane) 35-50-7																ARC IARC NTP
1,4-dioxane 101-07-1																ARC IARC NTP
1,4-dioxane 35-50-7																ARC IARC NTP
1,4-dioxane 101-07-1	2.42	2.42			5	22										ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Limit exp. to 100 mg/m ³ See 81				See 81			ARC IARC NTP
1,4-dioxane 101-07-1	2.42	2.42			2	9										ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81										ARC IARC NTP
1,4-dioxane 101-07-1	2.42	2.42			2	9										ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Limit exp. to 100 mg/m ³ See 81				See 81			ARC IARC NTP
1,4-dioxane 101-07-1																ARC IARC NTP
1,4-dioxane 35-50-7																ARC IARC NTP
1,4-dioxane 101-07-1	10	10	150	165	20	275	150	160	20	275	50	160	20	280		
1,4-dioxane 35-50-7			51										51			
1,4-dioxane 101-07-1	1.5				1.5								1.5			ARC IARC NTP
1,4-dioxane 35-50-7			See 81			See 81			Ca. Limit exp. to 100 mg/m ³ See 81				See 81			ARC IARC NTP

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SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PLAC	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
1,1,2-Trichloroethane 75-10-5	0	35			0	45			0	45			0	55	2	2A ARC 1 PLAC 1 NTP 1
Trichloroethylene 79-12-6	50	100	100	100	50	110	100	100	15	21			30	170	2	2A ARC 1 PLAC 1 NTP 1
Trichloroethylene Polytrichloroethylene 75-10-4			0.300	0.600			0.300	0.600			0.300	0.600	1000	5600	4	
Trichloromethane (chloroform) 57-82-3	10	10			2	10			2	10			10	50	1	ARC 1 PLAC 1 NTP 1
Trichlorobenzene 121-45-9	5				5				5				5			
Trichlorobenzene (1,2,3-trichlorobenzene) 75-10-2	1	1			1	1			1	1			1	1		
2,4,6-Trichlorophenol 58-10-4																2A ARC 1 PLAC 1 NTP 1
2,4,5-Trichlorophenoxy acid (TCPP) 53-75-5	1				1				1				1	1	2	ARC 1
1,2,3-Trichloropropane 36-19-4	1	50			10	50			1	50			50	100	2	ARC 1

SUBSTANCE CAS #	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMS		PLAC	CARCINOGEN
	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV	STEL	STEL	TLV	TLV		
1,1,2-Trichloro-1,2,2,2-tetrafluoroethane 75-13-1	100	150	250	300	100	100	250	300	100	100	250	300	500	1000	4	
Trichloroethylene (Cisomer) 1312-70-5	5				5				5							
Trichloroethylene Sulfonated 15466-22-3	0.05				0.05				0.05				0.15			ARC 2A NTP 2
Trichloroethylene NAC-6																
102-11-4																
Trichloroethylene 121-44-4	10	41	15	60	10	40	15	60					10	40	4	
Trichloroethylene 75-10-4	100	100			100	100			100	100			100	100	4	
Trichloroethylene 15466-22-3	0.005	0.005			0.005	0.04			0.005	0.04			0.005	0.04		
152-30-7																
152-30-7	5	2	15	30	10	24	15	30	10	24	15	30				
15-50-3																
2,4,6-Trichlorobenzene 127-17-7																ARC 1 NTP 1

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SUBSTANCE	ACGIH TLV		OSHA PEL		NIOSH REL		DPE BASE		PEAK	CARCINOGEN
	TLV	STEL/CEIL (C)	PEL	STEL/CEIL (C)	REL	STEL/CEIL (C)	TLV	PEL		
Trimethyl borate	25	25	25	25	25	25				
1551-37										
Trimethyl phosphite										
512-56-1										
Trimethyl phosphite	2	2	2	2	2	2				
27-45-9										
2,4,7-Trimethylphosphite										
129-79-3										
2,4,6-Trimethylphosphite	2.1		2.1		2.1	2.3	2.1			
Peric acid 58-99-1			Sum		Sum		Sum			
2,4,6-Trimethylphosphite	5		2.1		1.5		1.5			
Trimethyl phosphite			Sum		Sum		Sum			
2,4,6-Trimethylphosphite	2.5		2.5		2.5		2.5			
119-96-7	Sum		Sum		Sum		Sum			
Trimethyl phosphite	2.1		2.1		2.1					
19-30-9	Sum		Sum		Sum					
Trimethyl phosphite	5		5		5					
902-34-9										

SUBSTANCE	ACGIH TLV		OSHA PEL		NIOSH REL		DPE BASE		PEAK	CARCINOGEN
	TLV	STEL/CEIL (C)	PEL	STEL/CEIL (C)	REL	STEL/CEIL (C)	TLV	PEL		
CAS 9										
Trimethyl phosphite	3		3		3					
115-86-6										
Triphenyl	0.1		0.1		0.05		0.15			ARC 1, 2
5-chlorotriphenyl	1.1 of combined triphenyl ester		Triphenyl ester		CA: Triphenyl ester		(P)			
Triphenyl-pure-ester										ARC 1
Triphenyl-pure-ester (Triphenyl)										
66-76-8										ARC 1
Triphenyl-pure-ester (Triphenyl)										ARC 1, 2
52-24-4										
Triphenyl-pure-ester (Triphenyl)										ARC 1, 2
26-72-7										ARC 1, 2
Triphenyl-pure-ester (Triphenyl)										ARC 1, 2
72-57-1										
Triphenyl-pure-ester (Triphenyl)	5	10	5	10	5	10				
Triphenyl-pure-ester (Triphenyl)										
Triphenyl-pure-ester (Triphenyl)	1	3	1	3	1	3				
Triphenyl-pure-ester (Triphenyl)	100	500	100	500	100	500				
1000-64-2										

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMSA		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
150																
Unlabeled									2.5	2.5						
150-12-5									15-min TWA ceiling							
Unlabeled																PLAC 1
45-75-1																
Unlabeled (residual)	2.2	2.2			2.2	2.2	2.2	2.2	2.2	2.2	2.2		2.25	11		PLAC 1
Unlabeled (residual) Soluble & dependent compounds as U					Soluble comp	Unlabeled comp			Ca Soluble	Unlabeled comp			2			
Unlabeled (residual)																PLAC 1
51-75-6																PLAC 1
6-Valerolactone	50	175			50	175			50	175						
110-42-3																
Vanadium sesquioxide as V ₂ O ₅ Respirable dust or fume 31-42-1	2.25	2.25			2.25	2.25			2.25	2.25			2.25	1.2		
Vegetable oil meal	0	0			15-min TWA ceiling				15-min TWA ceiling				5			
	0	0			15-min TWA ceiling	Respirable fraction			15-min TWA ceiling	Respirable fraction						
Vinyl acetate	0	15	20	10	10	30	20	50	4	5			0	15		PLAC 1
128-75-4	100	142	15	15	5	15	10	15	15-min TWA ceiling				0			
Vinyl benzoate	50	215	100	425	50	215	100	425	50	215	100	425	20	15		PLAC 1
Styrene monomer 100-42-5													0			

SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				DPE MMSA		PLAC	CARCINOGEN
	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV	STEL/CEILING	STEL/CEILING	TLV	TLV		
CAS #																
Vinyl bromide	5	12	22	12	5	20										PLAC 1
505-40-2									Ca. known human conc. (LOQ 0.2 ppm)							PLAC 1
Vinyl chloride	5	12	22	12	5	20										PLAC 1
75-01-4					Ca. known human conc. (LOQ 0.2 ppm)				Ca. known human conc. (LOQ 0.2 ppm)							PLAC 1
Vinyl cyclohexane	2	12	22	12	2	10			1	10						PLAC 1
Acrylonitrile 107-13-1	Stop	Stop			Stop	Ca. known human conc. (LOQ 0.2 ppm)			Ca. known human conc. (LOQ 0.2 ppm)							PLAC 1
Vinyl cyclohexane	2	12	22	12	2	10			1	10						PLAC 1
100-40-3																
Vinyl cyclohexane	10	12	22	12	10	20			10	20						PLAC 1
100-47-4	Stop	Stop			Stop	Stop			Ca. known human conc. (LOQ 0.2 ppm)							PLAC 1
Vinyl fluoride									1	5						PLAC 1
71-42-5									15-min TWA ceiling							
Vinylidene chloride (1,1-Dichloroethene) 75-35-4	5	20	20	10	1	4			15-min TWA ceiling				2	6		PLAC 1
1,1-Dichloroethene									Ca. known human conc. (LOQ 0.4 ppm)							PLAC 1
75-28-7									1	5						PLAC 1
6-Valeryl-pyrrolidone									15-min TWA ceiling							
85-12-0									15-min TWA ceiling							

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SUBSTANCE	ACGIH TLV				OSHA PEL				NIOSH REL				JPG MMS		PEAK	LARC NOISE
	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV	STEL	CEILING	TLV	TLV		
Zinc and its compounds as Zn	5		0		5		0		5		0		5			

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50-00-0	Formaldehyde	57-57-8	beta-Propiolactone
50-07-7	Mitomycin C	57-74-9	Chlordane
50-18-0	Cyclophosphamide	58-88-9	Lindane (gamma-Hexachlorocyclohexane)
50-29-3	DDT (Dichlorodiphenyltrichloroethane)	58-89-2	N-Nitrosomorpholine (NMO)
50-32-8	Benzo(a)pyrene	60-11-7	4-Dimethylaminobenzene
50-55-5	Reserpine	60-29-7	Ethyl ether (Diethyl ether)
50-78-0	Acetaminophen D	60-34-4	Methyl hydrazine
50-78-2	Acetylsalicylic acid (Aspirin)	60-35-5	Acetamide
51-52-5	Propylthiouracil	60-57-1	Dieldrin
51-75-2	Nitrogen mustard (N-Methyl-bis(2-chloroethyl) amine)	61-57-4	Minidazole
51-78-6	Urethane (Ethyl carbamate)	61-82-5	Amtrite (3-Amino-1,2,4-triazole)
51-78-6	Carbamic acid, ethyl ester	62-44-2	Phenacetin
52-24-4	Tri(1-aziridinyl)phosphine sulfide (Thiotepa)	62-50-0	Ethyl methane sulphonate
53-70-3	Dibenz(a,h)anthracene	62-53-3	Aniline & homologues
53-86-3	2-Acetylaminothiouracil	62-55-5	Thioacetamide (TAA)
54-11-5	Nicotene	62-56-6	Thiourea
55-18-5	N-Nitrosodiethylamine (NDEA)	62-73-7	Dichlorvos (DDVP)
55-38-9	Fenitron	62-74-8	Sodium fluoroacetate (Sodium perfluoroacetate)
55-63-0	Nitrophenol (NQ)	62-75-9	N-Nitrosodimethylamine (N,N-Dimethylnitrosamine)
55-88-1	1,4-Bis(2-diethylaminoethyl)benzene (Mylaran)	63-25-2	Carbaryl (Sevin)
56-04-2	Methylthiouracil	63-82-3	Phenacylbenzamine hydrochloride
56-23-5	Carbon tetrachloride (Tetrachloromethane)	64-17-5	Ethyl alcohol (Ethanol)
56-38-2	Parathion	64-18-6	Formic acid
56-53-1	Diethylstilbestrol	64-19-7	Acetic acid
56-56-3	Benzo(a)anthracene	64-67-5	Diethyl sulfate
56-75-7	Chloramphenicol	66-27-3	Methyl methanesulphonate
56-81-5	Glycine mist	66-75-1	Urethyl mustard
57-14-7	1,1-Dimethylhydrazine	67-56-1	Methyl alcohol (Methanol)
57-24-9	Strychnine	67-63-0	Isopropyl alcohol
57-41-0	Phenylol (= sodium salt)	67-64-1	Acetone
57-54-1	Cinnamyl	67-65-3	Chloroform (Trichloromethane)

67-72-1	Hexachloroethane	75-07-0	Acetaldehyde
68-11-1	Thioglycolic acid	75-08-1	Ethyl mercaptan (Ethaneethiol)
68-12-2	Dimethylformamide	75-09-2	Methylene chloride (Dichloromethane)
68-76-8	Tri(aziridinyl)-para-benzoquinone (Triaziquone)	75-12-7	Formamide
70-25-7	N-Methyl-N'-nitro-n-nitrosoguanidine	75-15-0	Carbon disulfide
71-23-8	n-Propyl alcohol	75-21-8	Ethylene oxide
71-36-3	n-Butyl alcohol	75-25-2	Bromotolene
71-43-2	Benzene	75-31-0	Isopropylamine
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	75-34-3	1,1-Dichloroethane (Ethylene chloride)
72-02-5	Vinyl fluoride	75-35-4	Vinylidene chloride (1,1-Dichloroethylene)
72-20-8	Endrin	75-38-7	1,1-Difluoroethylene (Vinylidene fluoride)
72-43-5	Methoxychlor	75-43-4	Dichlorodifluoromethane
72-57-1	Trypan blue (commercial grade)	75-44-5	Phosgene (Carbonyl chloride)
74-82-8	Methane	75-45-8	Chlorodifluoromethane
74-83-9	Methyl bromide	75-47-8	Iodoform
74-84-0	Ethane	75-50-3	Trimethylamine
74-85-1	Ethylene	75-52-5	Nitromethane
74-86-2	Acetylene	75-56-8	Propylene imine (2-Methylaziridine)
74-87-3	Methyl chloride	75-58-9	Propylene oxide (1,2-Epoxypropane)
74-88-4	Methyl iodide	75-61-6	Difluorodibromomethane
74-89-5	Methylamine	75-63-8	Trifluorobromomethane
74-90-8	Hydrogen cyanide	75-64-9	tert-Butylamine
74-93-1	Methyl mercaptan (Methaneethiol)	75-65-0	tert-Butyl alcohol
74-98-4	Ethyl bromide (Bromoethane)	75-69-4	Trichlorofluoromethane (Fluorotrichloromethane)
74-97-5	Chlorobromomethane (Bromochloromethane)	75-71-8	Dichlorodifluoromethane
74-98-6	Propane	75-74-1	Tetramethyl acid
74-99-7	Methyl acetylene (Propyne)	75-86-5	Acetone cyanohydrin
75-00-3	Ethyl chloride (Chloroethane)	75-99-0	2,2-Dichloropropionic acid
75-01-4	Vinyl chloride (Chloroethylene)	76-01-7	Pentachloroethane
75-04-7	Ethylamine	76-03-8	Trichloroacetic acid
75-05-8	Acetonitrile	76-06-2	Chloroacetonitrile (Nitrochloromethane; Trichloroacetonitrile)

76-11-9	methane)	79-24-3	Nitroethane
76-12-0	1,1,1,2-Tetrachloro-2,2-difluoroethane	79-27-8	Acetylene tetrabromide (1,1,2,2-Tetrabromoethane)
76-13-1	1,1,2,2-Tetrachloro-1,2-difluoroethane	79-34-5	1,1,2,2-Tetrachloroethane
76-14-2	Dichlorotetrafluoroethane	79-41-4	Maleicrylic acid
76-15-3	Chloropentafluoroethane	79-44-7	Dimethyl carbamoyl chloride
76-22-2	Camphor, synthetic	79-46-9	2-Nitropropane
76-28-0	Methoxyflurane	80-62-8	Methacrylic acid, methyl ester
76-44-8	Heptachlor and Heptachlor epoxide	81-07-2	Saccharin
77-47-4	Hexachlorocyclopentadiene	81-81-2	Warfarin
77-73-8	Dicyclopentadiene	82-28-0	1-Amino-2-methylanthraquinone
77-78-1	Dimethyl sulfate	82-68-8	Pentachloronitrobenzene
78-00-2	Tetraethyl lead	83-38-1	Pinone (2-Pivalyl-1,3-indandione)
78-10-4	Ethyl silicate (Tetraethyl orthosilicate)	83-78-4	Rosanol (commercial)
78-30-8	Trichloroethyl phosphate	84-68-2	Diethyl phthalate
78-34-2	Diazathion (Dethion)	84-74-2	Diethyl phthalate
78-58-1	Isophorone	85-44-8	Phthalic anhydride
78-61-8	Isobutyl amine	86-50-0	Azophos-methyl (Guthon®)
78-62-0	Isobutyronitrile	86-57-7	1-Nitroazobenzene
78-63-1	Isobutyl alcohol	86-88-4	ANTU (o-Naphthylthiourea)
78-67-5	Propylene dichloride (1,2-Dichloropropane)	87-88-3	Hexachlorobutadiene
78-82-2	sec-Butyl alcohol	87-88-6	Pentachlorophenol
78-83-3	Methyl ethyl ketone (MEK; 2-Butanone)	88-08-8	2,4,6-Trichlorophenol
78-86-5	Chloroacetone	88-10-8	Diethylcarbamoyl chloride
78-00-5	1,1,2-Trichloroethane	88-12-0	N-Vinyl-2-pyrrolidone
78-01-6	Trichloroethylene	88-72-2	Nitroethane, o-isomer
78-04-9	Chloroacetyl chloride	88-73-3	1-Chloro-2-nitrobenzene
78-08-1	Acrylamide	88-88-1	Phic acid (2,4,6-Trichlorophenol)
78-08-4	Propionic acid	88-73-8	o-sec-Butylphenol
78-10-7	Acrylic acid	90-84-8	Miche's ketone
78-20-8	Methyl acetate	91-08-7	Toluene-2,6-diisocyanate
		91-20-3	Naphthalene

91-56-6	tert-Naphthylamine	96-69-5	4,4'-Thiodi(6-tert-butyl-m-cresol)
91-94-1	3,3'-Dichlorobenzidine	97-56-3	o-Aminobenzotoluene
91-96-2	3,3'-Diaminobenzidine	97-77-8	Disulfiram
92-32-4	Biphenyl (Diphenyl)	98-00-0	Furfuryl alcohol
92-47-1	4-Aminodiphenyl	98-01-1	Furfural
92-84-2	Phenothiazine	98-07-7	Benzotrichloride
92-87-5	Benzidine	98-51-1	p-tert-Butyltoluene
92-93-3	4-Nitrodiphenyl (4-Nitrobiphenyl)	98-54-4	p-tert-Butylphenol
93-78-5	2,4,5-T (2,4,5-Trinitrophenylacetic acid)	98-62-8	Cumene
94-36-0	Benzoyl peroxide (Dibenzoyl peroxide)	98-63-8	alpha-Methyl styrene
94-58-6	Dihydroxatone	98-67-3	Benzal chloride
94-59-7	Satrols	98-95-3	Nitrobenzene
94-75-7	2,4-D (2,4-Dichlorophenoxyacetic acid)	98-08-1	Nitrotoluene, m-isomer
94-78-0	Phenazopyridine	98-55-8	4-Nitro-2-aminotoluene
95-06-7	Diethylthiocarbamic acid 2-chloroethyl-ester (Sulfatase)	98-56-2	5-Nitro-o-anisole
95-13-6	Indane	98-98-0	Nitrotoluene, p-isomer
95-49-8	o-Chlorotoluene	100-00-5	p-Nitrochlorobenzene
95-50-1	o-Dichlorobenzene (1,2-Dichlorobenzene)	100-01-8	p-Nitroaniline
95-53-4	o-Toluidine	100-37-8	2-Diethylaminoethanol
95-54-5	o-Phenylenediamine	100-40-3	Vinyl cyclohexene
95-68-1	2,4-Xyldine	100-41-4	Ethyl benzene
95-69-2	4-Chloro-o-toluidine	100-42-5	Styrene, monomer (Phenylethylene; Vinyl benzene)
95-79-4	5-Chloro-o-toluidine	100-44-7	Benzyl chloride
95-80-7	2,4-Diaminotoluene (Toluene-2,4-diamine)	100-61-8	N-Methyl aniline (Monomethyl aniline)
95-83-0	4-Chloro-o-phenylenediamine	100-63-0	Phenythiohydrazine
96-12-8	1,2-Dibromo-3-chloropropane (DBCP)	100-74-3	N-Ethymorpholine
96-16-4	1,2,3-Trichloropropane	100-75-4	N-Nitrosopropene (NPIP)
96-22-0	Diethyl ketone	101-14-4	4,4'-Methylene bis(2-chloroaniline); (MBOCA)
96-33-3	Methyl acrylate (Acrylic acid, methyl ester)	101-61-1	4,4'-Methylene bis(N,N-dimethyl) benzenamine (Michler's base)
96-45-7	Ethylene thourate	101-68-8	Methylene bisphenyl isocyanate (MDI)

101-77-8	4,4'-Methylene dianiline (4,4'-Diaminodiphenylmethane)	107-18-6	Allyl alcohol
101-80-4	4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline)	107-19-7	Propargyl alcohol
101-84-8	Phenyl ether, vapor	107-20-0	Chloroacetaldehyde
101-90-6	Diglycidyl resorcinol ether	107-21-1	Ethylene glycol vapor
102-84-5	Dicyclopentadienyl iron (Ferrocene)	107-30-2	Chloromethyl methyl ether (Methyl chloromethyl ether; Monochlorodimethyl ether)
102-81-6	3-N-Octylenedioxolane	107-31-3	Methyl formate (Formic acid, methyl ester)
105-46-4	sec-Butyl acetate	107-41-5	Hexylene glycol
105-60-2	Caprolactam dust	107-46-3	TEPP (Tetraethyl dithiopyrophosphate)
105-60-2	Caprolactam vapor	107-66-4	Diethyl phosphite
105-38-4	Ethyl butyl ketone (3-Heptanone)	107-67-8	Methyl propyl ketone (2-Pentanone)
105-46-7	p-Dichlorobenzene (1,4-Dichlorobenzene)	107-86-2	Propylene glycol monomethyl ether
105-49-0	p-Toluidine	108-03-2	1-Nitropropane
105-60-3	p-Phenylenediamine	108-05-4	Vinyl acetate
105-81-4	Quinone (p-Benzoquinone)	108-10-1	Methyl isobutyl ketone (Hexane)
105-87-6	Vinyl cyclohexene dioxide	108-11-2	Methyl isobutyl carbanol (Methyl amyl alcohol; 4-Methyl-2-pentanol)
105-88-7	1,2-Butylene oxide	108-18-8	Diisopropylamine
105-89-6	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	108-20-3	Isopropyl ether
105-82-3	Allyl glycidyl ether (AGE)	108-21-4	Isopropyl acetate
105-83-4	Ethylene dibromide (1,2-Dibromoethane)	108-24-7	Acetic anhydride
105-87-6	Butane	108-31-6	Maleic anhydride
105-88-0	1,3-Butadiene	108-44-1	m-Toluidine
107-02-6	Acrolein	108-45-2	m-Phenylenediamine
107-03-9	n-Propylmercaptan	108-46-3	Resorcinol
107-05-1	Allyl chloride	108-65-6	Propylene glycol 1-methyl ether-2-acetate
107-08-2	Ethylene dichloride (1,2-Dichloroethane)	108-63-8	Diisobutyl ketone (2,6-Dimethyl-4-heptanone)
107-07-3	Ethylene chlorohydrin (2-Chloroethanol)	108-64-6	sec-Heptyl acetate
107-12-0	Propylene	108-67-2	Methycyclohexane
107-13-1	Acrylonitrile (Vinyl cyanide)	108-68-3	Toluene (Toluid)
107-15-3	Ethylenediamine (1,2-Diaminoethane)	108-90-7	Chlorobenzene (Monochlorobenzene)
107-16-4	Glyoxal		

108-91-8	Cyclohexylamine	111-15-9	2-Ethoxyethyl acetate (Ethylene glycol, monoethyl ether acetate)
108-93-0	Cyclohexanol	111-30-8	Glutaraldehyde
108-94-1	Cyclohexanone	111-31-9	n-Hexylmercaptan
108-95-2	Phenol	111-40-0	Diethylene thiamine
108-96-5	Phenyl mercaptan	111-42-2	Diethanolamine
108-98-1	isopropoxyethanol	111-44-4	Dichloroethyl ether
108-60-4	n-Propyl acetate	111-45-9	Oxane
108-66-0	Pentane	111-46-3	Adiponitrile
108-73-9	n-Butylamine	111-76-2	2-Butoxyethanol (Ethylene glycol monobutyl ether)
108-74-0	n-Butyrolactone	111-64-2	Nonane
108-77-3	Malononitrile	111-66-6	n-Octylmercaptan
108-79-5	Butyl mercaptan (Butanethiol)	112-07-2	Ethylene glycol monobutyl ether acetate (2-Butoxyethanol acetate)
108-86-4	2-Methoxyethanol (Ethylene glycol, monomethyl ether)	112-55-0	Dodecylmercaptan
108-87-5	Methylal (Dimethoxymethane)	114-26-1	Propoxur (Baygon [®])
108-89-7	Diethylamine	115-02-6	Azaxene
108-94-4	Ethyl formate (Formic acid, ethyl ester)	115-07-1	Propylene
108-99-8	Tetrahydrofuran	115-10-6	Dimethyl ether
110-12-3	Methyl isobutyl ketone	115-26-6	Chlorodic acid
110-19-0	Isobutyl acetate	115-29-7	Endosulfan
110-43-0	Methyl n-amy ketone (2-Heptanone)	115-77-5	Pentacyantril
110-49-6	2-Methoxyethyl acetate (Ethylene glycol, monomethyl ether acetate)	115-86-6	Triphenyl phosphite
110-54-3	Hexane (n-Hexane)	115-90-2	Fensulfoturon (Dassant)
110-61-2	Succinonitrile	117-79-3	2-Aminocanthraquinone (AAQ)
110-62-3	n-Valeraldehyde	117-81-7	Di-sec-octyl phthalate (Di(2-ethylhexyl)phthalate; DEHP)
110-66-7	Pentylmercaptan	118-52-5	1,3-Dichloro-5,5-dimethyl hydantoin
110-80-5	2-Ethoxyethanol (Ethylene glycol, monoethyl ether)	118-74-1	Hexachlorobenzene (HCB)
110-82-7	Cyclohexane	118-96-7	2,4,6-Trinitrobenzene (TNT)
110-83-6	Cyclohexene	119-34-8	4-Amino-2-nitrophenol (2-Nitro-4-aminophenol)
110-86-1	Pyridine		
110-91-8	Morpholine		

119-90-4	o-Chianidine-based dyes (3,3'-Dimethoxybenzidine)	129-15-7	2-Methyl-1-nitroanthraquinone
119-93-7	o-Toluidine (3,3'-Dimethylbenzidine)	129-79-3	2,4,7-Trinitrofluorenone
120-71-8	p-Cresidine (Methyl-o-anisidine)	131-11-3	Dimethylphthalate
120-80-9	Catechol (Pyrocatechol)	132-32-1	3-Amino-9-ethylcarbazole
120-82-1	1,2,4-Trichlorobenzene	133-06-2	Caplan
121-44-6	Triethylamine	134-28-2	o-Anisidine hydrochloride
121-46-8	Trimethyl phosphite	134-33-7	alpha-Naphthylamine
121-69-7	Dimethylaniline (N,N-Dimethylaniline)	135-20-6	Cuplaron
121-75-6	Malethan	135-66-6	N-Phenyl-beta-naphthylamine
121-82-4	Cyclonite (RDX)	136-40-3	Phenazopyridine hydrochloride (PAP)
122-39-4	Diphenylamine	136-78-7	Seacon (Crag [®] herbicide)
122-60-1	Phenyl glycidyl ether (PGE)	137-06-3	Methyl 2-cyanoacrylate
122-66-7	Hydrazobenzene	137-17-7	2,4,5-Trimethylaniline
123-19-3	Dipropyl ketone	137-26-8	Thiram
123-31-9	Hydroquinone (Dihydroxybenzene)	138-28-7	n-Butyl lactate
123-42-2	Diacetone alcohol (4-Hydroxy-4-methyl-2-pentanone)	138-13-6	Nitrososuccinic acid (NTA)
123-51-3	Isobutyl alcohol	138-65-1	4,4'-Thiodianiline
123-66-4	n-Butyl acetate	140-67-8	Butylphenylacrylatepropyl chloroethyl sulfite (Aramite)
123-91-1	Dioxane (Dioxin)	140-69-5	Ethyl acrylate (Acrylic acid, ethyl ester)
123-92-2	Isobutyl acetate	141-32-2	n-Butyl acrylate (Acrylic acid, n-butyl ester)
124-09-4	1,6-Hexanediamine	141-43-6	Ethandiamine (2-Aminoethanol)
124-36-9	Carbon dioxide	141-66-2	Diclotophos
124-40-3	Dimethylamine	141-76-6	Ethyl acetate
125-72-7	Tri(2,3-dibromopropyl)phosphate (TRIS)	141-79-7	Mesityl oxide
126-73-6	Tributyl phosphate	142-64-3	Piperazine dihydrochloride
126-96-7	Methylacrylonitrile	142-62-5	Heptane (n-Heptane)
126-99-6	beta-Chloroprene (2-Chloro-1,3-butadiene)	143-10-2	Decylmercaptan
127-16-4	Perchloroethylene (Tetrachloroethylene)	143-33-9	Cyanide, Sodium
127-19-5	N,N-Dimethyl acetamide	143-50-0	Chlorozone (Kapone)
128-37-0	2,6-Di-tert-butyl-p-cresol	144-62-7	Oxalic acid
128-66-6	Cyanoacrylamide		

148-01-8	Ointamide (3,5-Dinitro-o-tolamide, Zalcene)	306-03-3	Chlorambucil
148-82-3	Mecholan	309-00-2	Aldrin
150-78-5	4-Methoxyphenol	314-40-8	Bromadiol
151-50-8	Cyanide, Potassium	315-22-0	Monocrotaline
151-56-4	Ethylenimine	330-54-1	Diuron
151-67-7	Hexothane	333-41-5	Diaz-non
154-93-8	8-Ischlorobethyl nitroacres BCNU)	334-88-3	Diazomethane
156-10-5	p-Nitrosodiphenylamine	353-50-4	Carbonyl fluoride
158-62-7	Calcium cyanamide	366-70-1	Procaine hydrochloride
166-56-9	Dibenzo(a,h)pyrene	406-90-8	Flurozene
166-84-0	Dibenzo(a,h)pyrene	408-21-2	Silicon carbide
182-45-4	Dibenzo(a,e)pyrene	420-04-2	Cyanamide
193-39-5	Indeno(1,2,3-cd)pyrene	434-07-1	Oxymethione
194-59-2	7H-Dibenzo(c,g)carbazole	443-48-1	Metronidazole
205-99-2	Benzo(b)fluoranthene	446-66-6	Azathioprine
218-01-8	Chrysene	460-19-5	Cyanogen
224-42-0	Dibenz(a,j)acridine	463-51-4	Ketene
228-36-8	Dibenz(a,h)acridine	478-45-8	Tetryl (2,4,6-Trinitrophenylmethylnitramine)
231-36-7	Diquat	482-80-8	Auramine manufacture
287-92-3	Cyclopentane	494-03-1	Chromaphazine
298-00-0	Methyl parathion	504-29-0	2-Aminopyridine
298-02-2	Phorate	505-60-2	Mustard gas (2,2'-Dichlorodiethyl sulfide)
298-04-4	Disulfoton	506-77-4	Cyanogen chloride
298-75-2	Tredsuphan	508-14-8	Tetrahydrofuran
299-84-3	Ronnel	512-56-1	Trimethyl phosphite
299-86-5	Culomate	513-37-1	Dimethyl vinyl chloride
300-76-5	Naled (Dibrom)	528-29-0	Dinitrobenzene (all isomers)
301-04-2	Lead acetate	531-76-0	Morphalin
302-01-2	Hydrazine	531-82-8	N-[4-(5-Nitro-2-furyl)-2-thiazolyl] acetamide (Furazafloxacin)
302-70-5	Nitrogen mustard N-oxide hydrochloride	532-27-4	alpha-Chloroacetophenone, Phenacyl chloride
303-34-4	Lasocarbene		



534-52-1	Dinitro-o-cresol	602-87-8	5-Nitroacenaphthene
540-59-0	1,2-Dichloroethylene (Acetylene dichloride)	603-34-9	Triphenyl amine
540-73-8	1,2-Dimethylhydrazine	612-64-6	N-Nitrosodiphenylamine
540-86-5	tert-Butyl acetate	613-35-4	N,N'-Diacetylbenzidine
541-85-5	Ethyl amyl ketone (3-Methyl-3-heptanone)	614-00-6	N-Nitrosodiphenylamine
542-75-6	1,3-Dichloropropene	615-06-4	2,4-Diaminobenzene
542-86-1	bis(Chloromethyl) ether	621-64-7	N-Nitrosodipropylamine (NDPA)
542-82-7	Cyclopentadiene	624-83-8	Methyl isocyanate
546-83-0	Magnesia	626-17-6	m-Pyridinol
552-30-7	Trimellitic anhydride	628-38-0	sec-Amyl acetate
556-84-0	1-[(5-Nitrofururyl)amino]-2-imidazolidinone	627-13-4	n-Propyl nitrate
556-52-5	Glycidol (2,3-Epoxy-1-propanol)	628-63-7	n-Amyl acetate
567-06-1	Zinc stearate	628-88-8	Ethylene glycol dinitrate
568-13-4	Carbon tetrabromide	630-08-0	Carbon monoxide
563-12-2	Ethion	630-20-8	1,1,1,2-Tetrachloroethane
563-47-3	3-Chloro-2-methylpropene	632-88-5	Magenta manufacture
563-80-4	Methyl isopropyl ketone	636-21-6	o-Toluidine hydrochloride
561-88-6	2-Nitronaphthalene	638-21-1	Phenylphosphine
563-80-8	o-Methylcyclohexanone	671-16-8	Procaine
564-84-9	Toluene-2,4-diisocyanate (TDI)	680-31-8	Hexamethyl phosphoramide
580-86-6	Methylazoxymethanol	681-84-6	Methyl siloxane
581-78-6	Methyl n-butyl ketone (2-Hexanone)	684-16-2	Hexafluoroacetone
582-62-1	Methylazoxymethanol sulfate	684-83-5	N-Nitroso-N-methylurea (NMU)
583-60-2	Vinyl bromide	738-73-8	N-Nitroso-N-ethylurea (EMU)
583-70-4	Chlorofluoromethane	784-41-0	1,4-Dichlorobenzene-2
584-42-3	Perchloromethyl mercaptan	786-34-4	Glycidoldehyde
584-72-9	1,1-Dichloro-1-nitroethane	788-82-5	N-Isopropylamine
586-86-1	N,N-Dimethyl ethyl amine	794-63-4	Panturon 8
586-78-7	2-Chloropropionic acid	822-08-0	Hexamethylene diisocyanate
600-25-8	1-Chloro-1-nitropropane	838-88-0	4,4'-Methylene bis(2-methylendine)
601-77-4	N-Nitrosodipropylamine	872-50-4	N-Methyl-2-pyrrolidone (NMP)

924-16-3	N-Nitrosod-n-butylamine (DNB)	1314-56-3	Phosphorus pentoxide
930-56-2	N-Nitrosopyrrolidine (NPNR)	1314-61-0	Tantalum oxide dust
944-22-9	Penox	1314-62-1	Vanadium pentoxide
999-61-1	2-Hydroxypropyl acrylate	1314-80-3	Phosphorus pentasulfide
1066-30-4	Chromic acid	1317-35-7	Manganese tetroxide
1116-54-7	N-Nitrosodiphenylamine (NOELA)	1317-65-3	Calcium carbonate
1120-71-4	Propene sulfone	1317-96-9	Silica-Crystalline, Tripol
1121-03-5	2,4-Butane sulfone	1319-77-3	Cresol, all isomers
1188-86-1	tert-Butyl chromate	1321-12-6	Nitroplene (all isomers)
1300-73-6	Xylenes (mixed isomers), (Dimethylaminobenzene)	1321-64-6	Pentachloronaphthalene
1302-74-5	Emery	1321-66-9	Trichloronaphthalene
1303-00-0	Gallium arsenide	1321-74-0	Divinyl benzene
1303-26-2	Arsenic pentoxide	1327-63-3	Arsenic trioxide production
1303-66-2	Boron oxide	1330-20-7	Xylene (o-, m-, p-isomers), (Dimethylbenzene)
1303-96-4	Borates, tetr., sodium salts, Anhydrous	1332-21-4	Asbestos
1303-96-4	Borates, tetr., sodium salts, Decahydrate	1332-56-7	Kaolin
1303-96-4	Borates, tetr., sodium salts, Pentahydrate	1333-74-0	Hydrogen
1304-82-1	Bismuth sesquioxide, Undoped	1333-82-0	Chromium trioxide
1304-82-1	Bismuth sesquioxide, Se-doped	1333-86-4	Carbon black
1305-62-0	Calcium hydroxide	1335-32-6	Lead subacetate
1305-78-8	Calcium oxide	1335-87-1	Hexachloronaphthalene
1306-18-0	Cadmium oxide fume	1335-88-2	Tetrachloronaphthalene
1306-18-0	Cadmium oxide production	1336-36-3	Polychlorinated biphenyls (PCBs)
1308-37-1	Iron oxide fume (Fe ₂ O ₃)	1338-23-4	Methyl ethyl ketone peroxide
1308-48-4	Magnesium oxide fume	1344-28-1	Aluminum oxide (alpha-Alumina)
1308-48-4	Magnesium oxide	1344-66-2	Calcium silicate (synthetic)
1308-64-4	Antimony trioxide, handling and use	1365-21-7	Substrates (proteolytic enzymes)
1308-64-4	Antimony trioxide production	1458-21-8	n-Nonylmercaptan
1310-56-3	Potassium hydroxide	1464-53-5	Diisopropylamine
1310-73-2	Sodium hydroxide	1477-56-0	m-Xylene d,d'-diamine
1314-13-2	Zinc oxide, dust and fume	1563-86-2	Carbocuran

1569-66-3	Cyclohexylmercaptan	2921-48-2	Chlorpyrifos
1589-47-8	2-Methoxy-1-propanol	2971-90-8	Clopidol
1615-60-1	1,2-Diethylhydrazine	3031-51-4	5-(Morpholinomethyl)-3-((5-nitro-1-furyl)idene)amino)-2-oxazolidinone
1633-63-6	1,4-Butane sulfone	3033-62-3	bis(2-Dimethylaminoethyl) ether
1639-09-4	n-Heptylmercaptan	3033-77-0	Glycidyl trimethyl ammonium chloride
1684-09-3	Benzyl violet 4B	3086-66-0	bis-Butylacrylate
1738-25-6	Dimethylaminopropionitrile	3173-72-6	1,5-Naphthylene diisocyanate
1749-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	3333-62-6	Tetramethyl azodicarbonyl
1838-75-6	2,4-Dichlorophenyl-p-nitrophenyl ether (TCX)	3383-66-6	Tenaphes
1912-34-6	Airazine	3684-06-6	Pencase 3R
1919-02-1	Picloram	3670-75-0	2-(2-Formylhydrazino)-4-(5-nitro-2-furyl) thiazole
1929-82-4	Nitazepine (2-Chloro-6-(trichloromethyl) pyridine)	3687-31-6	Lead arsenate
1937-37-7	Direct black 36 (technical grade)	3689-24-6	Sulfone (TEDP)
2039-67-4	o-Chlorostyrene	3687-34-3	5-Methylthiopyran
2104-64-6	EPN	3761-63-3	Pencase MX
2179-69-1	Allyl propyl disulfide	3771-19-6	Naloxone
2234-13-1	Octachloronaphthalene	3825-26-1	Ammonium perfluorooctanoate
2238-07-6	Diglycidyl ether (DGE)	4016-14-8	Isopropyl glycidyl ether (IGE)
2386-66-6	Mifex	4086-71-9	Isophorone diisocyanate
2425-06-1	Caprolact	4170-30-3	Crotonaldehyde
2426-08-6	n-Butyl glycidyl ether (BGE)	4343-03-4	Decarbazine
2431-60-7	2,3,4-Trichlorobutene-1	4685-14-7	Parasut
2526-36-1	Diethyl phenyl phosphite	5124-30-1	Methylene bis(4-cyclohexylisocyanate)
2581-62-4	Sulfur hexafluoride	5307-14-2	2-Nitro-p-phenylenediamine
302-46-2	Direct blue 6 (technical grade)	5332-63-6	1-Undecanethiol
3646-17-5	Oil orange 5B	5714-23-7	Sulfur pentasulfide
3682-20-4	2-Methyl-2,3-dihydroisothiazol-3-one	6369-63-6	Cetus Rel No. 2
3689-41-1	o-Chlorobenzylidene malononitrile	6423-43-4	Propylene glycol diacetate
3689-79-6	Sulfuryl fluoride	6823-22-4	Monocrotonates
3689-00-9	Octadecylmercaptan	7429-60-6	Aluminum
3917-26-2	Cetylmercaptan (1-Hexadecanethiol)		

7439-92-1	Lead	7583-56-2	Iodine
7439-96-5	Manganese dust and fume	7572-29-4	Dichloroacetylene
7439-98-7	Molybdenum	7580-67-6	Lithium hydride
7440-01-8	Neon	7816-94-6	Perchloryl fluoride
7440-02-0	Nickel	7531-90-5	Sodium bisulfite
7440-06-4	Platinum	7637-07-2	Boron trifluoride
7440-16-6	Rhodium	7646-85-7	Zinc chloride fume
7440-21-3	Silicon	7647-01-0	Hydrogen chloride
7440-22-4	Silver	7864-36-2	Phosphoric acid
7440-25-7	Tantalum	7864-36-3	Hydrogen fluoride
7440-28-0	Thallium	7864-41-7	Ammonia
7440-31-5	Tin	7864-60-8	Sulfuric acid
7440-33-7	Tungsten	7865-72-7	tert-Butyl glycidyl ether
7440-38-0	Antimony	7881-57-4	Sodium metabisulfite
7440-37-1	Argon	7887-37-8	Nitric acid
7440-38-2	Arsenic	7719-09-7	Thionyl chloride
7440-38-3	Barium	7719-12-2	Phosphorus trichloride
7440-41-7	Beryllium	7722-84-1	Hydrogen peroxide
7440-43-9	Cadmium	7722-86-5	Tetrasodium pyrophosphate
7440-47-3	Chromium	7723-14-0	Phosphorus (yellow)
7440-48-4	Cobalt	7726-96-6	Bromine
7440-50-8	Copper dust and fume	7727-37-8	Nitrogen
7440-58-6	Helium	7727-43-7	Barium sulfate
7440-58-7	Helium	7736-67-6	Lead chromate
7440-61-1	Uranium (natural)	7773-06-0	Ammonium sulfate
7440-65-5	Yttrium	7778-38-4	Arsenous acid, arsenic acid and their salts
7440-67-7	Zirconium	7778-18-9	Calcium sulfate (Gypsum; Plaster of Paris)
7440-74-6	Indium	7778-44-1	Calcium arsenate
7446-09-6	Sulfur dioxide	7782-41-4	Fluorine
7446-27-7	Lead phosphate	7782-42-5	Graphite (natural)
7446-34-6	Selenium sulfide	7782-48-2	Selenium



7782-50-8	Chlorine	9002-88-2	PVC
7782-65-2	Germanium tetrahydride	9004-34-6	Celulose
7782-79-8	Hydrazoic acid	9004-68-4	Iron dextran complex
7783-08-4	Hydrogen sulfide	9008-25-6	Starch
7783-07-6	Hydrogen selenide	10025-67-8	Sulfur monochloride
7783-41-7	Oxygen difluoride	10025-67-3	Phosphorus oxychloride
7783-54-2	Nitrogen trifluoride	10026-13-6	Phosphorus pentachloride
7783-60-0	Sulfur tetrafluoride	10028-16-6	Ozone
7783-78-1	Selenium hexafluoride	10028-67-2	Nitrous oxide
7783-80-4	Tellurium hexafluoride	10034-63-2	Hydrazine sulfate
7784-43-1	Arsine	10038-10-6	Hydrogen bromide
7786-34-7	Methylene chloride (Dichloromethane)	10046-13-2	Stenigmatocystin
7788-06-2	Strontium chromate	10048-04-4	Chlorine dioxide
7788-30-2	Bromine pentafluoride	10102-43-9	Nitric oxide
7790-91-2	Chlorine trifluoride	10102-44-0	Nitrogen dioxide
7803-61-2	Phosphine	10108-84-2	Cadmium chloride
7803-62-3	Silane	10210-68-1	Cobalt carbonyl
7803-62-6	Silicon tetrahydride (Silane)	10294-33-4	Boron trifluoride
8001-35-2	Chlorinated camphene (Touaphene)	10886-86-6	N-Nitrosodimethylaniline
8002-74-2	Paraffin wax fume	11087-68-1	Chlorodiphenyl (54% chlorine)
8003-34-7	Pyrethrum	11103-68-9	Zinc chromate
8006-61-9	Gasoline	12001-38-2	Misc
8008-64-2	Turpentine	12001-38-4	Crocidolite (Asbestos)
8008-20-6	Kerosene	12001-29-6	Chrysotile (Asbestos)
8022-00-2	Methyl celonon (Dimethon-methyl)	12002-48-1	Trichlorobenzene
8030-30-6	Naphtha (Coal tar; Rubber solvent)	12078-66-1	Manganese cyclopentadienyl tetracarbonyl
8032-32-6	Vid & P Naphtha	12108-13-3	2-Methylcyclopentadienyl manganese tetracarbonyl
8080-08-7	Rosin core solder (Colophony)	12125-02-9	Ammonium chloride fume
8082-41-3	Stoddard solvent	12172-73-6	Amosite (Asbestos)
8082-42-4	Asphalt (petroleum) fumes (Bitumen)	12804-68-9	Ferrocenium dust
8085-46-3	Dimethon (System [®])	13007-62-6	Chromium carbonyl

13010-47-4	1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU)	19287-48-7	Odeorane
13121-70-5	Cyhexatin (Tricyclohexyltin hydrazide)	19624-22-7	Pentacosane
13256-13-8	N-Nitrosomethylvinylamine (NMVA)	20816-12-0	Cadmium isocyanide
13256-22-9	N-Nitrosocarbazine (NSAR)	20830-81-3	Daunomycin
13360-57-1	Dimethylsulfamoylchloride	21087-64-8	Methobutin
13387-24-5	Gypsum (Calcium sulfate)	21351-79-1	Cesium hydrazide
13463-38-3	Nickel carbonyl	21645-51-2	Aluminum hydrazide
13463-40-6	Iron pentacarbonyl	21651-18-4	Tin oxide
13463-67-7	Titanium dioxide	22224-92-8	Penamphos
13494-80-8	Tellurium & compounds	23214-82-8	Adnamycin
13530-65-8	Zinc chromate	25013-15-4	Vinyl toluene (Methyl styrene, all isomers)
13758-18-0	Calcium chromate	25321-14-6	Dinitrotoluene
13838-16-9	Enflurane	25651-13-7	Trimethyl benzene
13952-84-6	sec-Butylamine	25651-28-4	Naphthalene diisocyanate (NDI)
14464-46-1	Silica-Crystalline, Cristobalite	25838-42-3	Methylcyclohexanol
14464-44-1	Ferobam	26140-60-3	Terphenyls
14807-98-6	Talc (containing no asbestos fibers)	26172-66-4	5-Chloro-2-methyl-2,3-dihydroisothiazol-3-one
14808-60-7	Silica-Crystalline, Quartz	26498-66-0	Plaster of Paris (Calcium sulfate)
14901-06-7	Cycasin	26628-22-8	Sodium azide
14977-61-8	Chromyl chloride	26852-21-6	Isodetyl alcohol
15158-40-7	N-Chlorotrimethyl morpholine	27478-34-8	Dinitronaphthalenes (all isomers)
15468-32-3	Silica-Crystalline, Tridymite	28434-86-8	3,3'-Dichloro-4,4'-diaminodiphenyl ether
15663-27-1	Cisplatin	29181-52-4	Anadine (o, p-isomers)
16218-75-3	Ethylidene norbornene	34580-84-8	Dicropylene glycol methyl ether
16543-55-8	N'-Nitrosanomicarbene (NINN)	35400-43-2	Sulcrotes
16752-77-5	Methomyl	36355-01-8	Polybrominated biphenyls (PBBs)
16842-03-8	Cobalt hydrocarbonyl	37300-23-5	Zinc chromate
17804-35-2	Beromyl	39156-41-7	2,4-Diaminobenzoic sulfates
18454-12-1	Lead chromate oxide	39413-47-3	Zinc beryllium silicate
18683-66-4	Streptozotocin (STR)	41683-62-9	1,2-Dichloromethoxyethane
		53469-21-9	Chlorodiphenyl (42% chlorine)

55720-98-5	Chlorinated diphenyl oxide	65986-93-2	Particulate polycyclic aromatic hydrocarbons (PPAH; Coal tar pitch volatiles)
55738-54-0	trans-2[(Dimethylamino)methylimino]-6-[2-(5-nitro-2-furyl)vinyl]-1,3,4-oxadiazol	66987-15-1	Portland cement
58716-67-8	2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	68478-85-7	L.P.G. (Liquified petroleum gas)
60676-86-0	Silica-Amorphous, Silica fused	69012-64-2	Silica-Amorphous, Silica fume
61786-32-7	Hydrogenated terphenyls	70687-70-4	2-Methoxypropyl-1-acrylate
61790-53-2	Silica-Amorphous, Dispersed (Earth unacidified)	83783-70-3	Perite
63448-38-8	Chlorinated paraffins (C ₁₂ , 60% chlorine), (Chloroparaffins, 20%-70% chlorine)	112926-00-8	Silica-Amorphous, Precipitated silica
65986-93-2	Coal tar pitch volatiles, as benzene-solubles	112928-00-8	Silica-Amorphous, Silica gel

MAX PEAK EXPOSURE LIMITATION CATEGORIES

Category	Short-term Limit		Frequency
	Day	Duration	
I. Local effects	2 x MAX	5 min. momentary value*	1
II. Substances with systemic effects			
a) Oral or inhalation			
i) 1 day - 10 min	2 x MAX	30 min. average value**	4
ii) 2 day - 10 min	5 x MAX	30 min. average value**	2
b) Substances with systemic effects			
c) Oral or inhalation			
i) 1 day - 10 min	10 x MAX	30 min. average value**	1
d) Substances showing very weak effects	2 x MAX	60 min. momentary value*	3
e) Substances showing moderate effect	2 x MAX	10 min. momentary value*	4

* The momentary value is a level which the concentration should never exceed. It represents a value to be observed in work area technical planning. The analytical testing can then be carried out by use of sampling procedures designed for recording average values.

** Half-life is the period of time in which an existing concentration falls to half its original value.

MAX EMBRYO/PETUS RISK OF DAMAGE CLASSIFICATION

Group A: A risk of damage to the developing embryo or fetus has been unequivocally demonstrated. Exposure of pregnant women can lead to damage to the developing organism even when MAX and BAT (Biological Tolerance) values for working conditions are observed.

Group B: According to currently available information a risk of damage to the developing embryo or fetus must be considered to be probable. Damage to the developing organism cannot be excluded when pregnant women are exposed even when MAX and BAT values are observed.

Group C: There is no reason to fear a risk of damage to the developing embryo or fetus when MAX and BAT values are observed.

Group D: Classification in one of the groups A-C is not yet possible because although the data available may indicate a risk they are not sufficient for this evaluation.

MAX GERM CELL MUTAGENS

- Substances which have been demonstrated to be germ cell mutagens in humans.
- Substances which have been demonstrated to be germ cell mutagens in experimental animals.
- Substances which have been demonstrated to cause genetic damage in mammals (including humans) germ cells without proof of transmutation.

DEFINITIONS, ABBREVIATIONS, TERMS, AND COCIMS

Concentration Definitions

SP-4: Human Carcinogen: sufficient evidence that carcinogenicity studies in support of a cancer classification.

SP-5: Human Carcinogen: weight of evidence of human carcinogenicity based on epidemiological studies.

SP-6: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-7: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-8: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-9: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-10: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-11: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-12: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-13: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-14: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-15: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-16: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-17: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-18: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-19: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-20: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-21: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-22: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-23: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-24: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-25: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-26: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-27: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-28: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-29: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-30: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-31: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-32: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-33: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-34: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-35: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-36: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-37: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-38: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-39: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-40: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-41: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-42: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-43: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-44: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

SP-45: Human Carcinogen: weight of evidence of carcinogenicity based on animal studies in sufficient.

ERRATA

1992 Guide to Occupational Exposure Values

Pg. 9 — Arsenic, elemental [7440-38-2], & inorganic compounds (except arsine), as As

ACGIH TLV should read:

mg/m³

(0.2)

NIC-0.01, A1

Pg. 9 — Arsenic trioxide production

Delete listing; included in listing
for Arsenic, elemental & inorganic
compounds (except Arsine)

AFFIDAVIT

RE: National Safety News

On this day, Robert Marecek appeared before me, the undersigned notary public, and after I administered an oath to him, upon his oath, he said

"My name is Robert Marecek. I am capable of making this affidavit and the facts stated in this affidavit are within my personal knowledge and are true and correct.

I am over 21 years of age. I have never been convicted of a felony and am competent in all respects to give the testimony contained in this affidavit.

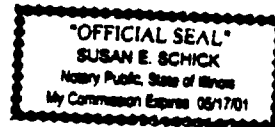
I am a custodian of records of the National Safety Council. Attached hereto are 999 pages of records. These said records are kept by the National Safety Council in the regular course of business, and it was in the regular course of business of the National Safety Council for an employee or representative of the National Safety Council, with knowledge of the act, event, condition, opinion, or diagnosis recorded to make the record or to transmit information thereof to be included in such record; and the record was made at or near the time or reasonably soon thereafter. The records attached hereto are the original or exact duplicates of the originals.

Robert J. Marecek
AFFIANT

SUBSCRIBED AND SWORN TO BEFORE ME this the 15 day of September 19 99.

Susan E. Schick
Notary Public in and for
The State of Illinois

Susan E. Schick
Notary's Printed Name



My Commission expires 5/17/01