

1,1,1-TRICHLOROETHANE AND FOUR OTHER INDUSTRIAL CHEMICALS

VOLUME 130

This publication represents the views and expert opinions of an IARC Working Group on the Identification of Carcinogenic Hazards to Humans, which met remotely, 7–22 October 2021

LYON, FRANCE - 2022

IARC MONOGRAPHS
ON THE IDENTIFICATION
OF CARCINOGENIC HAZARDS
TO HUMANS

Table S1.2 Summary of personal exposure to 1,1,1-trichloroethane according to 3-digit SIC code in samples collected during NIOSH Health Hazard Evaluations

3-Digit SIC description	N	Range (ppm){mg/m³}	*Mean (ppm) {mg/m³}
Electrical machinery and parts (HETA 95-0296-2547)	21	69–198{383–1099}	[120{666}]
Fabricated rubber products (HETA 77-0011-1338, HETA 80-0209-1396)	73	{ND-134}	[{19.1}]
Fabricated rubber products (HETA 90-0246-2314)	21	3-878 {16.7-4873}	[337.6 {1874}]
Products of purchased glass (HETA 81-048-969)	7	ND-181.0 {1005}	[78.7 {437}]
Iron and steel products (HETA 78-0121-1071, HETA 83-0015-1809, HETA 85-0482-1730)	23	0.7–154.0 {3.9–855}	[50.2 {279}]
Miscellaneous plastic products (HETA 78-0052-1483, HETA 81-0029-1088, HETA 85-0108-1593)	18	ND-520.0 {2886}	[42.7 {237}]
Fabricated metal products (HETA 80-0193-1081, HETA 83-0170-1346, HETA 92-0010-2234)	20	ND-129.0 {716}	[26.3 {146}]
Electrical industrial apparatus (HETA 81-0288-1257, HETA 83-0275-1394, IWSB 095.11)	9	ND-66.0 {366}	[17.0 {94}]
Blast furnace, steel works, rolling mill, and finishing mill products (HETA 87-0142-1802, HETA 87-0252-1857, HETA 88-0377-2120)	17	{ND-399}	[14.2 {79}]
Blank books, loose leaf binders and devices (HETA 86-0051-1911)	36	1.2–123.9 {6.7–688}	[12.3 {68}]
Rubber and plastics hose and belting (HETA 89-0267-2139)	6	2.4-57.0{13.3-316}	[12.2 {68}]
Broad woven fabrics, manmade fibres and silk (IWSB 083.14)	27	2.0-68.4 {11.1-380}	[11.8 {65}]
Electronic components and accessories (HETA 81-0370-1050, HETA 83-0164-1377, HETA 83-0269-1430, HETA 84-0023-1462, HETA 87-0353-1899, HETA 90-0223-2211, HETA 91-0292-2467, IWSB 068.17)	52	ND-106.2 {589}	[11.7{65}]
Aircraft and parts (HETA 82-0075-1545, HETA 82-0123-1258. HETA 83-0369-1672)	32	0.2–106.1 {1.1–589}	[11.0 {61}]
Commercial printed matter (HETA 81-0106-1003, HETA 81-0173-1051, HETA 93-0366-2370, IWSB 077.07F)	51	0.2–114.0 (1.1–633)	[10.5 {58}]
Shirts, nightwear, underwear, trousers, and work clothing, men's and boy's (HETA 88-0230-1939, HETA 88-0269-1993)	7	0.3–31.0 {1.7–172}	[10.3 {57}]
Miscellaneous transportation equipment, and parts (HETA 87-0367-1987)	17	ND-16.9 {93.8}	[6.2 {34}]
Office, computing, and accounting machines, and parts and accessories (HETA 88-0122-1912)	7	{< LOQ-180}	[6.0 {33}]
General industrial machines and equipment (HETA 91-0251-2218, HETA 91-0377-2383)	19	0.2–38.0 {1.1–211}	[5.8 {32}]
Paperboard containers and boxes (HETA 84-0108-1821, HETA 85-0308-1829)	22	0.3–13.7 {1.7–76}	[4.5 {25}]
Ship and boat building and repairing (HETA 78-0135-1333, HETA 83-0128-1485)	53	ND-111.2 {617}	[4.1 {23}]
Radio and TV receiving sets; phonographs; recorders; microphones; loudspeakers; audio amplifiers; & other audio equipment & accessories (HETA 80-0168-1204)	50	{ND-151}	[{13.3}]
Books and pamphlets (HETA 81-0261-1085)	7	{3–15}	{7.5}
Miscellaneous chemicals (HETA 85-0268-1641)	5	0.8–1.6 {4.7–8.9}	[1.2 {6.4}]
Brooms and brushes; linoleum and other floor coverings with a textile base; matches; candles, tapers and similar items (HETA 80-0165-0907)	3	{0.015-0.015}	{0.015}
Converted paper and paperboard products, except containers and boxes (HETA 88-0140-2517)	16	{ND-4.8}	[{0.7}]
Plastics materials and synthetic resins; synthetic rubber; synthetic and other manmade fibres, except glass (HETA 81-0147-1644)	31	{ND-9}	[{0.6}]
Textile goods (HETA 86-0343-1822)	8	0.3-0.6{1.7-3.3}	[0.3 {1.7}]
Motor vehicles and motor vehicle equipment, and parts (HETA 87-0350-2084)	5	{ND-1.0}	[{0.6}]
Miscellaneous plastics products (HETA 88-0198-2133, HETA 93-0670-2557)	16	0.1-0.3 {0.6-1.7}	[0.2 {1.1}]
Bituminous coal and lignite (HETA 89-0062-2004)	11	ND-0.07 {0.4}	[0.1 {0.6}]
Special classification provisions (HETA 83-0128-1485)	14	{ND-127}	[{22.5}]

HETA, Hazard Evaluation and Technical Assistance; LOD, limit of detection; LOQ, limit of quantification; ND, not detected; NIOSH, National Institute for Occupational Safety and Health; SIC, Standard Industrial Classification.

Source: HHE reports can be downloaded from the NIOSH webpage https://www2a.cdc.gov/hhe/search.asp (NIOSH, 2016).

Reference

NIOSH (2016). Health Hazard Evaluations (HHEs). The National Institute for Occupational Safety and Health. Available from: https://www2a.cdc.gov/hhe/search.asp, accessed 17 November 2021.

^{*}Measurements below the LOD were replaced with LOD/2 before calculating means.