### Agents Classified by the *IARC Monographs*, Volumes 1–122

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<th>Year(^1)</th>
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## Agents Classified by the *IARC Monographs*, Volumes 1–122

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<th>Volume</th>
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<th>Group</th>
<th>Volume</th>
<th>Year¹</th>
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<td>(NB: There is <em>evidence suggesting lack of carcinogenicity</em> in humans of coffee drinking for cancers of the pancreas, liver, female breast, uterine endometrium, and prostate. Inverse associations with coffee drinking have been observed with cancers of the liver and uterine endometrium.)</td>
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[^1]: Year is the year the evaluation was conducted.
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<td>Furniture and cabinet making (see Wood dust)</td>
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<td>Furosemide (Frusemide)</td>
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<td><em>Fusarium graminearum, F. culmorum, and F. crookwelliense</em>, toxins derived from (zearalenone, deoxynivalenol, nivalenol, and fusarenone X)</td>
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<td>116355-83-0</td>
<td><em>Fusarium moniliforme</em>, toxins derived from (fumonisin B₁, fumonisin B₂, and fusarin C)</td>
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<td><em>Fusarium sporotrichioides</em>, toxins derived from (T-2 toxin)</td>
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<td>Gamma-Radiation (see X- and Gamma-Radiation)</td>
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<td>Gasoline (NB: Overall evaluation upgraded to Group 2B with supporting evidence from other relevant data)</td>
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<td>Gasoline engine exhaust (see Engine exhaust, gasoline)</td>
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## Agents Classified by the *IARC Monographs*, Volumes 1–122

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<th>Volume</th>
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<td>Hepatitis B virus (chronic infection with)</td>
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<td>High-temperature frying (see Frying)</td>
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¹ Note: Group 1 indicates that there is sufficient evidence in humans of carcinogenicity; Group 2A indicates that there is limited evidence in humans of carcinogenicity; Group 2B indicates that there is limited evidence in experimental animals of carcinogenicity; Group 3 indicates that there is inadequate evidence in humans and experimental animals of carcinogenicity; Group 4 indicates that there is sufficient evidence in experimental animals of non-carcinogenicity.
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POLYMERIC IMPLANTS PREPARED AS THIN SMOOTH FILMS (WITH THE EXCEPTION OF POLY(GLYCOLIC ACID))
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- **Sunlamps and sunbeds (see Ultraviolet-emitting tanning devices)**
- **Surgical implants (see Ceramic implants, Dental materials, Implanted foreign bodies, Metallic implants, Organic polymeric materials, Orthopaedic implants, Polymeric implants, Silicone breast implants)**

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<td>000137-26-8</td>
<td>Thiram</td>
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<td>007440-29-1</td>
<td>Thorium-232 and its decay products</td>
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<td>78, 100D</td>
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<td>013463-67-7</td>
<td>Titanium dioxide</td>
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<td>47, 93</td>
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<td>Tobacco, smokeless</td>
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<td>Tobacco smoke, second-hand</td>
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<td>Tobacco smoking</td>
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### Agents Classified by the *IARC Monographs*, Volumes 1–122

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<tr>
<th>CAS No.</th>
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<th>Group</th>
<th>Volume</th>
<th>Year</th>
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<tr>
<td>000108-88-3</td>
<td>Toluene</td>
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<td>Toluene diisocyanates</td>
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<td>008001-35-2</td>
<td>Toxaphene (Polychlorinated camphenes)</td>
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<td><strong>Toxins derived from certain <em>Fusarium</em> species (see <em>Fusarium</em>)</strong></td>
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<td>Trichlormethine (Trimustine hydrochloride)</td>
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<td>000076-03-9</td>
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<td>63, 84, 106</td>
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<td>Triethylene glycol diglycidyl ether</td>
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<td>4,4',6-Trimethylangelicin plus ultraviolet A radiation</td>
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<td>000137-17-7</td>
<td>2,4,5-Trimethylaniline</td>
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<td>27, Sup 7</td>
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<td>000088-05-1</td>
<td>2,4,6-Trimethylaniline</td>
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<td>27, Sup 7</td>
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<td>015625-89-5</td>
<td>Trimethylolpropane triacrylate, technical grade</td>
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<td>003902-71-4</td>
<td>4,5',8-Trimethylpsoralen</td>
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<td>2,4,6-Trinitrotoluene</td>
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<td>000217-59-4</td>
<td>Triphenylene</td>
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<td>000068-76-8</td>
<td>Tris(aziridinyl)-para-benzoquinone (Triaziquone)</td>
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<tr>
<td>000545-55-1</td>
<td>Tris(1-aziridinyl)phosphine oxide</td>
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<td>000051-18-3</td>
<td>2,4,6-Tris(1-aziridinyl)-s-triazine</td>
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<td>000115-96-8</td>
<td>Tris(2-chloroethyl) phosphate</td>
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<td>48, 71</td>
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<tr>
<td>038571-73-2</td>
<td>1,2,3-Tris(chloromethoxy)propane</td>
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<td>000126-72-7</td>
<td>Tris(2,3-dibromopropyl) phosphate (NB: Overall evaluation upgraded to Group 2A with supporting evidence from other relevant data)</td>
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<td>062450-06-0</td>
<td>Trp-P-1 (3-Amino-1,4-dimethyl-5H-pyrido[4,3-b]indole)</td>
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<td>Trp-P-2 (3-Amino-1-methyl-5H-pyrido[4,3-b]indole)</td>
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<td>000072-57-1</td>
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<td>8, Sup 7</td>
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<td>012070-12-1</td>
<td>Tungsten carbide with cobalt metal (see Cobalt metal with tungsten carbide)</td>
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<td>007440-48-4</td>
<td>Ultraviolet radiation (wavelengths 100-400 nm, encompassing UVA, UVB, and UVC)</td>
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<td>55, 100D*, 118*</td>
<td>2018 online</td>
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<tr>
<td></td>
<td>*Volume 100D concluded that there is <em>sufficient evidence</em> for ocular melanoma in welders</td>
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<tr>
<td></td>
<td>*Volume 118 concluded that ultraviolet emissions from welding are carcinogenic to humans (Group 1). There is sufficient evidence in humans for the carcinogenicity of ultraviolet emissions from welding</td>
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<td>Urethane (see Ethyl carbamate)</td>
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<td>001314-62-1</td>
<td>Vanadium pentoxide</td>
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<td>000128-66-5</td>
<td>Vat Yellow 4</td>
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<td>Very hot beverages at above 65 °C (drinking)</td>
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<td>116</td>
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<td>000143-67-9</td>
<td>Vinblastine sulfate</td>
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<td>1995</td>
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<td>000593-60-2</td>
<td>Vinyl bromide (NB: (1) Overall evaluation upgraded to Group 2A based on mechanistic and other relevant data; (2) For practical purposes, vinyl bromide should be considered to act similarly to the human carcinogen vinyl chloride.)</td>
<td>2A</td>
<td>39, Sup 7, 71, 97</td>
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<td>009003-22-9</td>
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<td>000100-40-3</td>
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<td>000106-87-6</td>
<td>4-Vinylcyclohexene diepoxide</td>
<td>2B</td>
<td>Sup 7, 60</td>
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<tr>
<td>000075-02-5</td>
<td>Vinyl fluoride (NB: (1) Overall evaluation upgraded to Group 2A based on mechanistic and other relevant data; (2) For practical purposes, vinyl fluoride should be considered to act similarly to the human carcinogen vinyl chloride.)</td>
<td>2A</td>
<td>Sup 7, 63, 97</td>
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<td>009011-06-7</td>
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¹ Year of publication in print; if published in electronic format only, this is stated as “online”

² Includes radiofrequency electromagnetic fields from wireless phones

Last update: 30 July 2018